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ABSTRACT

This bibliography presents a modern definition of the conceptual framework from which to view natural resources, and affords access to information which examines resources from the social scientists point of view. It presents five broad divisions of activity or variables which include (1) Natural and Human Resources, (2) Epistomological and Scientific Resources, (3) Economic and Cultural Resources, (4) Attitudinal Directions, and (5) Selected Current Issues. It is international in scope, and provides access to information available in each division including research and writing in the field, statistical data, directories, research aids such as dictionaries and handbooks, and special reference works indicative of the state of the art in this decade. (HB)

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NATURAL RESOURCES

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PREFACE

The basic compilation of this bibliography was done by Carole W. Forsythe during a Natural Resources Institute in the summer of 1966. Since that time the bibliography has been revised, edited and updated. This work was done under the auspices of the late Dr. Charles A. Dambach, Director, School of Natural Resources. Mrs. Irene B. Hoadley, The Ohio University Libraries, supervised the revision of the bibliography.

Extensive use has been made of a publication entitled, Science and Technology Literature; a Selected Bibliography of Sources, compiled by Robert W. Burns, Science Librarian at the University of Idaho (1964). Mr. Burns has done a remarkable job of annotating a large number of reference materials in science and technology; many of the citations included here are quoted directly from his bibliography and indicated by the notation: Bookmark.

For the initial preparation of this work thanks are extended to Ruth M. Erlandson, Research Consultant at The Ohio State University Libraries, for giving technical direction to the study; to Mr. V. Lotkowski, Professor of Geography at Antioch College, for suggesting the format of the section on Climatological Resources; and to Mr. D. Rock, Associate Director, Glen Helen, for reviewing and criticizing the section on Forestry.

Thanks go also to Arthur Carhart of the Conservation Library Center at Denver Public Libraries and to Dr. Paul B. Sears, Professor, Yale University.

DESIGN OF THE STUDY

ISSUES AND BASIC CONCEPTS

Introduction

If it were easy to define what a natrual resource is, or with what analytic and statistical tools one describes such resources, there would be little need for an introduction except for purposes of mechanical explanation. If natural resources research were an acknowledged and accepted field of inquiry, there would be even less need for the discussion which follows. At present, however, neither of these conditions exists. Where resource consciousness does occur in institutional form, it is often partial; and thus our resource agencies, charged with the analysis and management of our resources in their physical contexts, must often give way to other demands from agencies and groups concerned primarily with social, political and economic activities.

The researcher will probably be surprised at some of the citations included in this bibliography. Those concerned with resource management have in the past tended to separate the "land" from the land-labor-capital or man-mind-land complex. As a rule, discussions on natural resources have been limited to categories such as: land and soils, minerals, forests, fish and wildlife, water and so forth, including the social context as an aside or afterthought. More recent philosophy and discussion give at least equal consideration to human resources and to the fields of ecology and planning. The discussion which follows elaborates the theoretical framework and rationale for this modern view of resource use, which says essentially that "resources are not; they become."[1] Further research, conducted with these basic issues in mind, should help us to rationalize our public policies and private decisions concerning the use and management of our resources.

Confusion Over Definition

Resources have sometimes been defined in circular fashion, that is, that fish and wildlife, plants and lands, water and air, minerals and fuels were resources, and that, therefore, resources were these things. This view was probably satisfactory for the ecological investigator. The social scientists and philosophers, however, introduced difficulties by attempting to circumscribe the concept of a resource, allowing for the inclusion of the above phenomena

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[1]Erich W. Zimmermann, Introduction to World Resources, edited by Henry L. Hunker.

but describing them in terms of their function. The "new theoretics" has been described as including "all the things and conditions in nature man can use to help meet his needs and aspirations."[2] It includes no less than the biologically and physically significant environment and man's actions in it.

An only slightly narrower definition would view the natural resources as part of three broad classes of resources, the other two being cultural and human. This is analogous to the trinity of land-labor-capital or man-mind-land. However, definitions and approaches vary. The most important point to be made is that a resource is a concept, and more, that the concept belongs essentially in the domain of the social sciences. The word itself implies the existence of an actor or agent. A plant may be a resource, but a resource is not automatically a plant.

Confusion Over Attitudes: Conservation Philosophies

The debates over conservation and resource scarcity, which have formed such a large part of our vocal history and those over resource scarcity and economic development which are now raging, lend direct support to the above statement. What one begins to understand from a brief historical survey is not the precise role of resources but, the role of value judgments in evaluating that role. Prophets of doom, coming from the ranks of scientists, public officials and concerned citizens, have told us to mend our ways before we consume the planet which provides us life. Others, including scientists but drawing mainly from industrialists, maintain that "technology" and "capital" substitute for "resources" and that as there is no end to man's ingenuity there is nothing to fear. Harold Barnett and Chandler Morse[3] suggest that conservation writings may be divided into four main categories: philosophical naturalism, manifesting a metaphysical, often abstract concept of nature; conservation ethics, calling for wise management of our resources for the purposes of maintaining or creating a "good life;" conservation aesthetics, primarily a plea for the primacy of aesthetic values; and the ecological viewpoint, more analytic in nature but incorporating varieties of conservation values into the analysis.

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[2] Stanley A. Cain, "The Nature and Role of Resources," McGraw-Hill Yearbook of Science and Technology (1963), p. 111.

[3] Scarcity and Growth; the Economics of Natural Resource Availability (1963).

The Place of Resources in Academic Analysis

The ecological analysis has led to further controversy, as between the pessimists and optimists noted above. The question of the optimum relation of man and his environment begs rigorous analysis. The issues under study are both practical and conceptual. There is increasing awareness of the possibilities of depletion of non-renewable resources in relation to total stock and the growth of population, but there is no assurance to what extent "technology" and "capital" may substitute for these resources. The pressures of population on the environment, of the earth's capacity to support human life is unknown; given the requirements of industrial growth, it is not known how distribution of population will enable us to derive maximum benefit from the natural universe. What time period that maximization should be attempted is not known. The philosophy of the conservationists has helped establish in our consciousness the need for such considerations. Their urgings for "wise use of natural resources" must be met with an analytical framework for deciding what is and what is not wise.

A small number of social scientists have turned their attention to problems of resource use. Among the demographers, notably Robert C. Cook, Irene Taeuber and C. B. Goodhart, the concern is, of course, the relation between resources and population. Political scientists Norman Wengert, Lyle Craine, Arthur Maass, Ernest Griffith, Luther Gulick and Robert Schultz are noted for their writings dealing with resource problems. Economists include Joseph Spengler, Edward Mason, John Ise, Ciriacy-Wantrup, Anthony Scott, John Kenneth Galbraith and a host of writers on problems of international economic development. The basic discipline for considering resource and social relationships is, of course, economic geography. However, there is still no organized body of knowledge which would derive from a theory explaining the interrelatedness of things:

> Take two pieces of land of the same size and physical characteristics. One, which formed part of an open plain, is a natural resource. Another, which has been cleared of trees, is partly capital . . . . Renewable land can be increased by discovery, and by investment which makes no-rent land at the margin more accessible, and both can be decreased by intensive use and depletion . . . . If a natural resource is acquired as the result of extensive exploration, it may be regarded as capital.[4]

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[4]Charles P. Kindleberger, Foreign Trade and the National Economy (1962).

A Conceptual Framework: Design of the Bibliography

Probably not much more discussion is needed to explain the wide range of materials included in this bibliography. When studying the land and the stream as resources, their function as agents for supplying human needs and men as agents of transforming the land is being studied. When one part is abstracted from the human-cultural-natural resources complex, it is only for the purpose of putting it back together in the proper relationship.

DESIGN OF THE BIBLIOGRAPHY

As emphasized above, resources are being examined from the social scientist's point of view. The rationale for compiling this bibliography was the lack of a comprehensive statement on just what constituted a resource and from whose point of view it should be analyzed. Section A, Contributions to the Field--Studies and Inventories, provides a survey of what some of these statements have been and what some of the research has included. It is hoped that the researcher will not only become familiar with these frames of thought but also develop his own exposition of complex relationships, both on small and large scales. One does not have to be a social scientist to use the concepts and methods of systems analysis.

The diagram which follows this section is one way of identifying what the elements of an overall system might be (note that in the present context, the word element means, simply, a part of a whole, the pieces which must be identified, the variables). The diagram is a series of wheels within wheels, whose relative positions are not intended to identify cause and effect, but rather to define a universe in which any set of resource processes may be located. In the center wheel are grouped those environmental phenomena which constitute the basic elements of economic activity, which serve as objects of scientific research and which must be managed by men to provide them with the biological, economic and cultural requisites of life. The categories chosen are, for the most part, common terms designating phenomena "used" by men in the twentieth century. Thus the composition of the class of resources called minerals has changed through history; the concept of air as a resource is only beginning to be recognized.

The second wheel serves the function of Erik Erikson's filter through which consciousness is determined, transformed and transforms. This includes the organization of scientific knowledge as well as cultural and economic patterns. The third wheel represents the translation of mental sets into action or the processes which become part of a resource system or congeries. The categories chosen are those used by the United Nations for presenting data on

economic activity* and may be further subdivided into 1,312 items according to the revised Standard International Trade Classification. The fourth circle, including only the two concepts of "conservation" and "development," represents additudinal directions in any process or system involving resource phenomena.

Some Mechanics

Within these concepts, the organization of the bibliography and the material included is intended to further scientific thinking by including as special cases under broader headings topics normally receiving prime attention in natural resources literature. Reference material has been categorized, wherever possible, according to its location on a continuum of research and its application, production, trade and consumption.

A glance at the table of contents will show that the pigeonholes provided by the wheel have not been followed exactly. The major divisions remain Science and Technology, Resources and The Economic, Political and Social Environment. However, resource phenomena are counted and accounted for in many different ways; thus forestry literature is placed in the Resources pigeonhole, but forest products statistics will be found in Part III on economic activities; literature on agronomy and related agricultural sciences is labeled "Resource," while commodity data, farm finance and production data, etc., will be found in Part III. In general, references in the Science and Technology section pertain directly to a discipline or vocation; the Resources section includes material of a scientific or technical nature dealing directly with the resource phenomenon--and usually from an interdisciplinary viewpoint; materials in the section dealing with the Economic, Political and Social Environment look at resources as they move in the productive processes as well as at some of the more general determinants of resource use, such as finance and capital flows, industrial and transportation processes. Some sources, of course, often contain both technical and economic information. In such cases, material has been assigned to one or another category on the basis of the concentration of its application to one or another field. A brief note at the beginning of each section will indicate where the student should look for further information on his topic. The subject index is intended to be an indicative rather than a comprehensive guide. The longer sections have been indexed more thoroughly than shorter ones. It is expected that the student will find a generalized "key word" in the index which will lead him to the specific information by process of inepection. A title index is also provided for quick reference.

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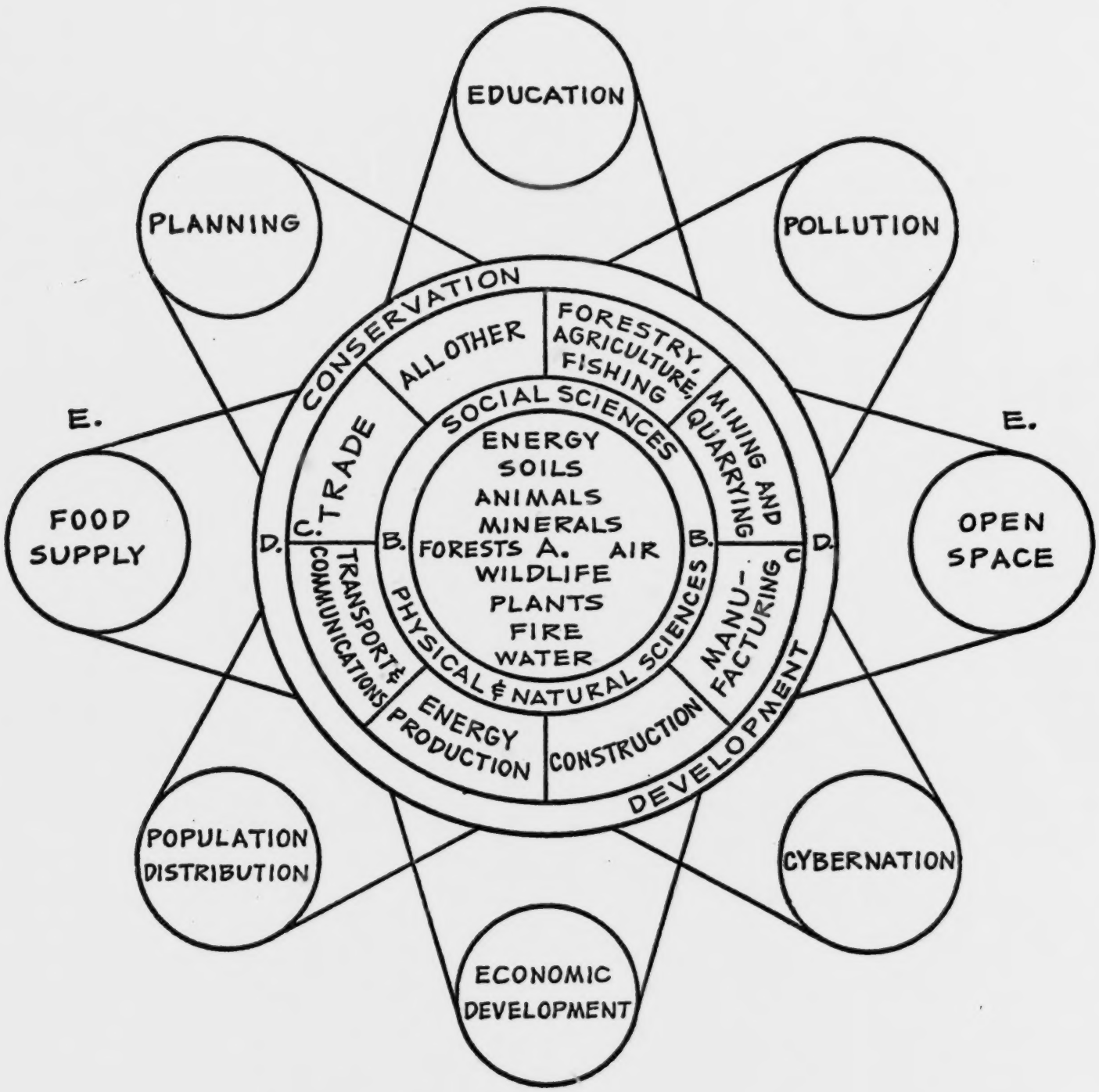
*Except for the category labeled "Energy Production," termed "Electricity, Gas and Water" in most statistical publications.

The bibliography is not intended to meet the needs of every particularized research interest. The attempt has been, rather, to provide access to the information available in each category, including research and writing in the field, statistical data, directories, research aids such as dictionaries and handbooks and special reference works indicative of the "state of the art" in this decade. The former two types of literature represent continuing sources of information; the latter two categories include material which will undoubtedly be obsolete within a few years. The scope of the study is international. The material included, however, is intended to provide access to, rather than to expose for each country the detailed information available for the United States.

Carole W. Forsythe



A. NATURAL & HUMAN RESOURCES

B. EPISTOMOLOGICAL & SCIENTIFIC RESOURCES

C. ECONOMIC AND CULTURAL RESOURCES

D. ATTITUDINAL DIRECTIONS

E. SELECTED CURRENT ISSUES

NOTE: WHEELS ARE SUPERIMPOSED UPON EACH OTHER AND MAY BE WHIRLED. THUS SPATIAL RELATIONSHIPS ABOVE ARE NOT MEANT TO REFLECT FUNCTIONAL RELATIONSHIPS.

SECTION A

CONTRIBUTIONS TO THE FIELD

Theoretical Statements

Current writhers who address themselves. directly or indirectly, to the scientific analysis of resource relationships and/or the public issues plaguing the twentieth century come from many fields. A sampling of this literature is presented below.

A-1 American Institute of Planners Journal. (American Institute of Planners). Washington, D. C., 1925- . Quarterly.

This is a journal of commentary and research which addresses itself to the broad range of problems with which planners are concerned.

A-2 Basic Concepts of Ecology. Clifford B. Knight. New York, The MacMillan Co., 1965.

The text is concerned with a wide range of basic principles of modern ecology, discussing history, the limiting factors of stratification and zonation, abiotic and biotic factors, climatology, the food factor, population and community ecology, ecological succession, the basic environments--aquatic and terrestrial areas, statistical procedures, radiation, pesticides, pollution, water, and oceans.

A-3 The Challenge of Man's Future. Harrison Brown. New York, Viking Press, 1954.

An especially stimulating volume for the layman, including a brief overview of man's emergence and the issues of his use of world resources--energy, food, etc.--in the context of a growing world population.

A-4 The Concepts of Conservation (A Guide to Discussion). Conservation Foundation. New York, 1956.

A-5 Conservation of Natural Resources. 3rd edition. Guy Harold-Smith, New York, John Wiley and Sons, Inc., 1965.

One of the most recent examples of textbook materials, presenting a naturalist orientation through several chapters exploring aspects of the physical environment, but also including chapters on planning at national, state. and local levels.

A-6 The Conservation Yearbook, A Directory and Guide to the Conservation of Renewable Natural Resources and to the Conservation Agencies and Organization. Baltimore, Maryland, Monumental Printing Co., 1962. New edition in progress.

This publication describes governmental and private agencies, including their functions, personnel, operations, publications, and so forth. Material is divided into the categories of: land and water resources; forests and forest products; national forests, state forestry, forest fire protection, forest planting; wildlife; national land reserve; reclamation; wilderness; parks, education; and conservation publications.

A-7 The Human Use of the Earth. Philip Wagner. New York, Free Press of Glencoe, 1960.

Essentially a typology, or taxonomy, of the concepts with which we may study the social and physical aspects of man and environment. The major questions specifically dealt with are: "What are the relationships between the human body, as a system, and the conditions of its environment, both natural and artificial?" and at greater length, "What are the relations between different types of artificial environments as systems, and their natural and societal environments?"

A-8 Introduction to World Resources. Henry L. Hunker,editor. New York, Harper and Row, 1964.

Henry Hunker, professor of geography at the Ohio State University, has edited the first ten chapters of Erich W. Zimmerman's World Resources and Industries, which first appeared in 1933. The major elements of Zimmerman's functional theory of resources, i.e., that "resources are not; they become," are presented in this stimulating book.

A-9 Man and Nature. George Perkins Marsh. Cambridge, Mass., Belknap Press, 1965.

The work was originally published in 1864. Appearing at the peak of confidence in the inexhaustibility of American resources, it was the first book to controvert the myth of superabundance and spell out the need for reform. It was supposed to be, in the words of Marsh, "a little volume showing that whereas others think that the earth made man, man in fact made the earth." There are only minor alterations of the original work.

A-10 Man, Mind and Land, A Theory of Resource Use. Walter Firey. New York, Free Press of Glencoe, 1960.

Firey attempts to develop a game theoretic, or logical framework for the discussion of problems of resource use and conservation in terms of the ecological, ethnographic, and economic elements of any given problem. He demonstrates how such a framework might be used in three case studies involving agricultural resource processes and systems.

A-11 Man's Role in Changing the Face of the Earth. William L. Thomas, Jr., editor. Chicago, Chicago University Press, 1956.

This volume, sponsored by the Wennergren Foundation for Anthropological Research and the National Science Foundation, includes the papers of 70 participants in an international symposium of the above title. The issues which concerned this conference involve both history and process of climates, soils, biotic communities, ecology of wastes, seas and waters, urban-industrial demands, and prospects for the future.

A-12 Natural Resources and International Development. Marion Clawson, editor. Baltimore, Johns Hopkins Press for Resources for the Future, 1964.

Explores the role of resources in economic development and international trade and in our traditional approaches to analyzing these problems. The articles discuss resource commodities of international significance--agriculture, petroleum, food, and fisheries--and regional problems and relationships in the Soviet economy, Western Europe, African countries, and Latin America.

A-13 Natural Resources and the Political Struggle. Norman Wengert. New York, Doubleday, 1955.

A basic premise of this study is the pluralistic character of decision-making. Wengert surveys some of the major personalities and conflicts which form a part of our resource heritage as we have searched to define the public interest.

Doubleday Short Studies in Political Science.

A-14 A New Approach to Economic Geography. Jahar Lal Guha and Prabhas Ranjam. Calcutta, India, World Press Private, Ltd., 1963.

The volume is divided into the following sections: The Study of Resources; Critical Study of the World's Manufacturing; World's Transport Facilities and Trade.

A-15 Perspectives on Conservation. Henry Jarrett, editor. Baltimore, Johns Hopkins Press for Resources for the Future, 1958.

Essays on history, policies, organization, demands, and technology of resource use and management by many of the intellectual leaders in the field: John Kenneth Galbraith, Paul B. Sears, Robert S. Cook, Abel Wolman, Samuel T. Dana, Henry C. Hart, Ernest S. Griffith, Thomas B. Nolan, Edward S. Mason, Gilbert F. White, William Pincus, and others.

A-16 The Population Crisis and the Use of World Resources. Stuart Mudd, editor. Bloomington, Indiana, Indiana University Press, for the World Academy of Arts and Sciences, 1964.

Articles by philosophers, physical and natural scientists, social scientists, discussing (a) the social and physical aspects of birth control and population growth, with economic and political examples; (b) biological research and possible action programs; and (c) to a lesser extent, the use of world resources.

A-17 Quality of the Environment. Orris C. Herfindahl and Allen V. Kneese. Baltimore, Johns Hopkins Press for Resources for the Future, 1965.

The authors seek to "show the non-economist why economic reasoning is not only helpful but indispensible in the analysis of the problems" and to "give the eonomists some understanding of the intriguing non-economic substance of these problems."

A-18 Resource Conservation. S. V. Ciriacy-Wantrup. Berkeley, California, University of California Press, 1952.

Among the first major contributions to the analysis of resource use and policies apart from judgements based on emotion and values. The study has become a standard reference text.

A-19 Resources and the American Dream. Samuel Ordway, Jr. New York, Ronald Press, 1953.

This small book explores the problem of expanding industrial consumption of resources and the dangers of reaching the limit of these resources.

A-20 Scarcity and Growth. The Economics of Natural Resource Availability. Harold J. Barnett and Chandler Morse. Baltimore, Johns Hopkins Press for Resources for the Future, 1963.

The authors explore the historical development of the scarcity hypothesis and apply modern methods of economic and econometric analysis to resource problems.

A-21 Science and Resources; Prospects and Implications of Technological Advance. Henry Jarrett, editor. Baltimore, Johns Hopkins Press for Resources for the Future, 1959.

Essays on social and scientific aspects of technological developments.

Selected Inventories

A-22 America's Needs and Resources. Twentieth Century Fund. New York, J. F. Dewhurst and Associates, 1955.

Survey covers consumption and capital requirements, government and foreign transactions, resources and capacities, and an introductory chapter on basic trends.

A-23 Annotated Index of Aerial Photographic Coverage and Mapping of Topography and Natural Resources Undertaken in Latin American Member Countries of the OAS. Pan American Union. Washington, D. C., 1964.

Nine vols.: Vol. 1, Bolivia (1964); Vol. 2, Chile (1965); Vol. 3, Equador (1965); Vol. 4, Haiti (1964); Vol. 5, Paraguay (1964); Vol. 6, Peru (1965): Vol. 7, Dominican Republic (1964); Vol. 8, Uruguay (1964); Vol. 9, Venezuela (1964).

A-24 Arid Lands, A Geographical Appraisal. E. S. Hills, editor. London, Methuen and Co., Ltd., 1966.

A geographical study of arid lands, including geology, meteorology, irrig irrigation, and human cultural elements.

A-25 Arid Zone Research. (United Nations Educational, Scientific and Cultural Organization). Paris, 1953- . Irregular.

A monograph series on all aspects of agriculture, land, and resource management in arid lands. The study started in 1948 with a proposal to UNESCO by the delegation of India that an international Institute of the Arid Zone be established. By 1950 an International Arid Zone Research Council had been established and reports commissioned. Publications cover hydrology, plant ecology, human and animal ecology, administrative and organizational programs. See especially The Future of Arid Lands, Gilbert F. White, editor, including papers and recommendations from the International Arid Lands Meetings (Publication No. 43, American Association for the Advancement of Science, Washington, D. C., 1956). This volume reports on a meeting of scientists from 17 countries and "as many disciplines." Papers presented include social as well as scientific approaches and include bibliographies.

A-26 Conservation--In the People's Hands. American Association of School Administrators. New York, 1964.

This study, undertaken in 1962, surveys practices in and attitudes toward conservation in various parts of the United States, giving particular emphasis to the role, present and potential, played by education.

A-27 Directory of Research Natural Areas on Federal Lands of the United States of America. United States Department of the Interior, Federal Committee on Research Natural Areas, 1968.

A list of over 300 federal land areas where natural processes predominate, and which may be used for research or education. Also includes a list of natural ecological types by representative plants and animals found in each area.

A-28 God's Own Junkyard: The Planned Deterioration of America's Landscape. Peter Blake. New York, Holt, Rinehart and Winston, 1964.

A photographic survey of America's junkyards, with provocative text.

A-29 International Conference on the Organization of Research and Training in Africa in Relation to the Study, Conservation and Utilization of Natural Resources. United Nations Educational, Scientific and Cultural Organization and United Nations Economic Commission for Africa. Paris, 1964.

Largos Conference: Selection of Documents. Lagos, Nigeria, 28 July to 6 August, 1964.

A-30 Measuring the Nation's Wealth. United States Congress. Joint Economic Committee. Subcommittee on Economic Statistics. Washington, D. C., 1965.

A particularly useful reference for problems of data availavility, accountability, comparability, and standards of collection, emphasizing both conceptual and technical problems.

A-31 Mission Reports. (United Nations Educational, Scientific and Cultural Organization). Paris, 1960- . Irregular.

Formerly, Technical Assistance Special Reports. See especially number 10: Projet d'enquete sur les ressources naturelles au sud du Chili.

A-32 The Natural Resource Content of United States Foreign Trade, 1870-1955. Jaroslav Vanek. Cambridge, Mass., Massachusetts Institute of Technology, 1963.

Based on an MIT Ph.D. thesis.

A-33 Natural Resources in Foreign Countries. Mary Anglemeyer. Washington, D. C., United States Department of the Interior Library, 1968.

An annotated bibliography of bibliographies arranged geographically. Within each region, arranged alphabetically by author, corporate authors first. 526 entries.

A-34 Natural Resources in Low-Income Countries: An Analytical Survey of Socio-Economic Research. Jaleel Ahmad. Pittsburgh, Pittsburgh University Press, 1960.

Inventory of published and unpublished completed research, 1948-1959, excluding Japan, northern Europe, and countries within the Sino-Soviet orbit.

A-35 Natural Resources of [State]. (United States Department of the Interior, Office of the Secretary. Washington, D. C., 1963- . Irregular.

The resource base of each state in the United States is described in separate booklets. Similar publications exist for selected regions of the United States: the Western Resource Handbook (Stanford University Press): Southeastern Resources Handbook (Georgia); etc.

A-36 Natural Resources Research. (United Nations Educational, Scientific and Cultural Organization). Paris, 1963- . Irregular.

Study series began at the invitation of the Economic Commission for Africa. Published to date are NRR I: A Review of the Natural Resources of the African Continent (New York, Columbia University Press, 1963), which includes an inventory of known data on topographic mapping, geology, applied geology and geo-physics, seismicity, climate and meteorology, hydrology, flora and fauna presented in the form of critical studies prepared by experts with a wide knowledge of the African continent and including bibliographies, maps, and lists of institutes, centers, and other sources of information; NRR II: Bibliography of African Hydrology (See M-11); NRR III: A Geologic Map of Africa (See G-17).

A-37 Oxford Economic Atlas of the World, 3rd edition. Prepared by the Cartographic Department of the Clarendon Press in collaboration with the Economist Intelligence Unit. London, 1965.

Multi-color maps showing the location of all types of economic activity. of resource requirements, and of natural factors in the environment, accompanied by tables and textual explanations.

A-38 A Program to Strengthen the Scientific Foundation in Natural Resources. A supplemental report to accompany Hearings on H.R. 6257 and H. R. 6900. Public Lands Committee, Hourse of Representatives. House Document No. 706, 81st Congress, 2nd Session. United States Library of Congress, Legislative Reference Service, November, 1950.

Survey of policies and programs of federal agencies toward formulating two bills: An Accelerated Program for Surveying and Mapping of the United States and its Territories and Possessions; A Comprehensive and Adequate Water Resources Basic Data Program. The study explains the instruments and agencies to be involved in the accelerated program.

A-39 Resources for Freedom. United States President's Materials Policy Commission. Washington, D. C., 1952. Five volumes.

The volumes remain classics among governmental survey and analysis undertakings. They are entitled: Foundations for Growth and Security; Outlook for Key Commodities; Outlook for Energy Sources; Promis of Technology; Selected Reports to the Commission.

A-40 Resources in America's Future: Patterns of Requirements and Availabilities, 1960-2000. Hans H. Landsberg, Leonard L. Fishman and Joseph L. Fisher. Baltimore, Johns Hopkins Press for Resources for the Future, 1963.

Landsberf and his associates combine in this massive volume data and discussion on the requirements for future living: including basic economic patterns, food, clothing and textiles, construction, transportation, durable goods, containers and packaging, paper products, military goods, heat and power, outdoor recreation: the demand for kev materials: crops, lumber and woodpulp, water, metals, mineral fuels: and the adequacy of the resource base in terms of land, water resources, energy, and nonfuel minerals.

A-41 Trends in Natural Resource Commodities: Statistics of Prices, Output, Consumption, Foreign Trade and Employment in the United States, 1870-1957. Neal Potter and Francis T. Christy. Baltimore, Johns Hopkins Press for Resources for the Future. 1962.

This work has become a standard reference for students concerned with historical trends and economic relationships.

A-42 World Balance Sheet. Robert R. Doane. New York, Harper, 1957.

"Comprehensive, inventoried examination covering the extent, distribution and relative depletion of the world's present physical resources in relation to their present rate of consumption, their monetary counterpart, valuation and population, showing comparative changes over a 70-year period; in double entry form, revealing where from and where to." --Introduction

A-43 World Population and Production. W. S. Woytinsky and E. S. Woytinsky. New York, Twentieth Century Fund, 1953.

This volume, together with one on world trade. transportation, and government (1954), represents an effort to put between the covers of two volumes a statistical picture of the collective resources, as well as the economic performance and promise of the nations of the world.

A-44 World Resource Statistics, a Geographic Sourcebook, 2nd edition. John C. Weaver and F. E. Luckerman, Minneapolis, Minnesota, Burgess Publishing Company, 1953.

Intended as a sourcebook for the student of economic geography, it is designed "to meet a basic need of the individual who would seek to understand the physical and human resources and the productive capacity of the commercial world. It is a modestly scaled attempt to give quantitative reality to the increasingly complex diversity of ways by which man draws upon his physical environment for his material well-being." --Preface. Includes tables on population and land resources, sources of power, metallic and non-metallic minerals, forests and fisheries, agriculture, including crops and livestock, and industry, urbanization, and trade.

A-45 World Resources Inventory. J. Buckminister Fuller and John MacHale. Southern Illinois University, Carbondale, Illinois, 1963.

Five volumes will report on an inventory of world resources, human trends and needs, conducted in five two-year increments in connection with the World Design Decade and in cooperation with the International Union of Architects.

Addenda

A-46 Proceedings. United Nations Scientific Conference on the Conservation and Utilization of Resources. New York, United Nations, Department of Economic Affairs, 1950.

Conference was held 17 August - 6 September 1949, at Lake Success, New York. Includes eight volumes: Plenary Meetings: Mineral Resources: Fuel and Energy Resources: Water Resources: Forest Resources: Land Resources; Wildlife and Fish Resources: Index.

A-47 Science and Technology for Development. United Nations, Secretary General. New York, 1963.

This eight volume report gives a narrative account of the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas. The text summarizes both oral discussions and contributors' papers; complete references to the papers are also given. The volumes of the series are: World of Opportunity: Natural Resources: Agriculture: Industry; People and Living; Education and Training: Science Planning: Plenary Proceedings, Lists of Reports, Papers and Index. These volumes probably contain the best compilation of that kind in the world today.

A-48 Summary Report to the President of the United States. Natural Resources Committee, National Academy of Sciences-National Research Council. Washington. D. C., 1962.

This study on natural resources availability was commissioned by President Kennedy in 1961. Seven short volumes accompany the report: Renewable Resources; Water Resources; Mineral Resources; Energy Resources: Marine Resources; Environmental Resources: Social and Economic Aspects of Natural Resources.

SECTION B

KEEPING UP TO DATE

B-1 Annual Report. Resources for the Future, Inc. Washington, D. C., Resources for the Future,Inc., 1952- . Annual.

The annual report of this independent research organization contains articles on current issues, summaries of studies completed and underway, list of books, reprints, and other publications available, etc.: as the name of the organization implies, its work is directly concerned with the concepts presented by this bibliography.

B-2 Conservation Education: A Selected Bibliography. Compiled by Joah Carvajal and Martha E. Munzer. Danville, Illinois, The Interstate Printers and Publishers, 1968.

Contains references to monographs in the fields of ecology, natural resources, human involvement in nature, and educational techniques in conservation. Also has author and title index, and a publishers directory.

B-3 Conservation News. National Wildlife Federation. Washington, D. C.. 1937- . Bi-weekly.

Includes articles on events and issues, legislative developments, book reviews, etc.

B-4 Conservation Report. National Wildlife Federation. Washington, D. C., - . Weekly.

Coverage of Congressional and legislative affairs.

B-5 Natural Resources Journal. (University of New Mexico, School of Law). Albuquerque, New Mexico, 1961- . Quarterly.

Articles of commentary and research, legal comments, and book reviews.

B-6 Outdoor News Bulletin. (Wildlife Management Institute). Washington, D. C., 1947- . Biweekly.

B-7 Natural Resources: Quality and Quantity: papers presented before a faculty Seminar at the University of California, Berkeley, 1961-1965. Edited by S.V. Ciriacy-Wantrup and James J. Parsons. Berkeley, University of California Press, 1967- .

Papers from a faculty Seminar at the University of California, sponsored by the Chancellor's Committee on Natural Resources. The central theme is "quality and quantity,"concerning the problems of land, population, water, pollution and wildlife, with ideas for further research and remedies for these problems.

B-8 Population Bulletin. (Population Reference Bureau). Washington. D. C., 1945- . Six times a year.

Supercedes a publication of the same title. published 1940-1941.

Provides factual background information on population trends and their social and economic factors.

B-9 Proceedings. (International Union for the Conservation of Nature and Natural Resources). Brussels, 1952- . Biennial.

Until 1958, issued by the International Union for the protection of Nature.

B-10 Proceedings and Papers of the Technical Meeting. (International Union for the Conservation of Nature and Natural Resources). London, 1952- . Annual.

Until 1958 issued by the International Union for the Protection of Nature.

B-11 Reclamation News. (National Reclamation Association). Washington, D. C.. 1935- . Monthly, except November-December.

B-12 Resources. (Resources for the Future, Inc.). Washington, D. C., 1959- . Three times a year.

Presents findings and conjectures from recent research on resource use.

B-13 Resource-Use Review. (Joint Council on Economic Education, Conservation and Resource-Use Education Project). Washington, D. C., - .

Books and conference reviews, current issues, teaching materials and suffestions.

B-14 SFI Bulletin. (Sport Fishing Institute). Washington, D. C., 1951- . Monthly.

B-15 Soil Conservation. (United States Department of Agriculture, Soil Conservation Service). 1935- . Monthly.

SECTION C

COMPREHENSIVE REFERENCES

C-1 Battelle Technical Review. (Battelle Memorial Institute). Columbus, Ohio, 1952- . Monthly.

Controlled circulation. Includes abstracts and bibliographic information.

C-2 British Abstracts. (Bureau of Chemical and Physiological Abstracts). London, 1945-1953, Ceased. Frequency varies.

BA was published in London by the Bureau of Abstracts in three parts as follows: A. Pure Chemistry and Physiology; B. Applied Chemistry; C. Analysis of BA for the first part of the applied chemistry section. Earlier volumes appeared under the titles British Chemical and Physiological Abstracts (1939-;944) and British Chemical Abstracts (1926-1933). British Abstracts is continued by the abstracts now appearing in the Journal of Applied Chemistry, in Analytical Abstracts and in the Journal of the Science of Food and Agriculture. --Bookmark

C-3 CSIR Research Review. (Council for Scientific and Industrial Research). Pretoria, Republic of South Africa, 1951- . Semi-annual.

Text in Afrikaans and English. A "classified list of publications arising from work undertaken or supported by CSIR, with author or synopses or summaries, where available."

C-4 CSIRO Abstracts. (Commonwealth Scientific and Industrial Research Organization). East Melbourne, Australia, 1952/53- . Monthly.

Comprising research undertaken or supported by scientific and industrial groups of the Commonwealth.

C-5 Indian Science Abstracts. (Indian National Scientific Documentation Centre). Delhi, India, 1965- . Monthly.

C-6 Journal of Research. (United States Department of Commerce, National Bureau of Standards). Washington, D. C., 1928- . Monthly.

Comprehensive scientific papers give complete details of the work, including laboratory data, experimental procedures, and theoretical, and mathematical analyses. Illustrated with photographs, drawings, charts. In four sections: A. Physics and Chemistry (bi-monthly); B. Mathematics and Mathematical Physics (quarterly); C. Engineering and Instrumentation (quarterly); D. Radio Science (monthly, published in cooperation with the U. S. National Committee of the International Scientific Radio Union).

C-7 Materials Research Abstracts: A Review of the Air Force Materials Research and Development. U. S. Library of Congress, Science and Technology Division. Washington, D. C., 1962.

A single volume bibliography of unclassified basic research projects supported by the Air Force. Arranged under the headings: Chemistry and Biochemistry, Materials, Physical Metallurgy and Solid State Science, and Problems in Materials Testing and Applications. Indices have been prepared for contractors, authors and subjects. -- Bookmark

C-8 Antarctic Bibliography. U. S. Naval Photographic Interpretation Center. Washington, D. C., 1951.

This single volume bibliography of approximately 5,500 references was compiled as a research aid for naval officers assigned to polar operations as well as geographers, explorers, and members of the medical, biological, engineering and earth science professions interested in the polar areas and particularly in the Antarctic. It covers the period 1600-1950 and is divided into the following subject sections: biology, botany, zoology (both vertebrate and invertebrate), ornithology, human ecology, geophysics, astronomy, geology, paleontology, petrology, glaciology, meterology, geography, oceanography, etc. An author index has been provided for the entire volume. --Bookmark

C-9 Antarctic Bibliography, volume II. National Science Foundation, Office of Antarctic Programs. Washington, D. C., 1966.

Also see volume I.

C-10 Applied Science and Technology Index. (The H. W. Wilson Company). New York, 1958- . Annual.

List articles in over 200 journals in English, dealing with the practical aspects of science, and with technology. Listed by subject heading.

C-11 Applied Science and Technology Index. (H. W. Wilson Co.). New York, 1958- . Monthly (with quarterly and annual cumulations).

A subject index to 210 English language journals, many of which are published in the U. S. with some British and Canadian titles. These cover material in the fields of aeronautics, automation, chemistry, construction, electricity, engineering, geology, physics, machinery, etc. Prior to 1958 this Index was part of the Industrial Arts Index.

C-12 Arctic Bibliography. (Arctic Institute of North America). Washington, D. C., 1953- . Annual.

An index to material on all phases of scientific endeavor involving the Arctic or near-Arctic regions, from medicine to geology and from the sociological aspects of life in the Arctic to plant geography. Preparation was begun in 1947. A list of journals cited is given in Volume I. Volumes I and II represent the initial compilation of references. Volume III is an index to these volumes, with each volume thereafter bringing the literature up to date. The arrangement of individual volumes is alphabetical by author with a subject index at the end. Each item also includes a code symbol for the library which contains the item. --Bookmark

C-13 Business Periodicals Index. (The H. W. Wilson Company). New York, 1958- . Quarterly.

Lists articles in about 200 journals in English, dealing with the fields of accounting, advertising, automation, banking, communication, management, and other business fields. Listed by subject heading.

C-14 Catalogue of Scientific Papers. Royal Society of London, London, various dates.

This index is arranged as follows: Vols. 1-6 cover the period 1880-1883 (Suppl.); Vols. 7-8 cover 1864-1873; Vols. 9-11 cover 1874-1883; Vol. 12 covers the period 1880-1883 (Suppl.); Vols. 13-19 cover the period 1884-1900. It is an author index to 1,555 scientific publications (serials only) from the nineteenth century. A list of serials indexed is given in the front of the first volume of each series. This index is accompanied by subject indices for pure mathematics, mechanics, physics, electricity, and magnetism and was continued by the International Catalog of Scientific Literature, covering material published after 1900. --Bookmark.

C-15 Catalog of Scientific Serials of All Countries. S. H. Scudder. New York, Krause Reprint, 1965.

This publication includes the transactions of learned societies in the natural, physical and mathematical sciences, 1633-1876.

C-16 Directory of Information Resources in the United States: Physical Sciences, Biological Sciences, Engineering. United States Library of Congress, National Referral Center for Science and Technology. Washington, D. C., 1965.

Includes libraries and other traditional bibliographic services; centralized information centers capable of providing processed and eveluated data; professional societies and other organizations through which contact may be made with individual specialists, industrial firms, government agencies. --Foreward. Arranged alphabetically by organization name. Subject index.

C-17 Directory of Special Libraries and Information Centers. Anthony T. Kruzes, editor. Detroit, Michigan, Gale Research Co., 1968.

Lists subjects contained in nearly 12,000 libraries of special interest in the United States and Canada.

C-18 Guide to Information Sources in Space Science and Technology. B. M. Fry and F. E. Mohrhardt, editors. New York-London, Interscience, 1963.

One of a series of guides which is designed, when completed, to constitute an effective "science information center, with an emphasis on the types of sources which will enable the user to keep abreast of current developments in the field." Other volumes will include atomic energy, biochemistry, biophysics, agriculture, meteorology, geology and minerals, biology, earth sciences, electronics, engineering, metals and metallurgy, mathematics and statistics, petroleum science and technology, plastics, power. Extensive subject and author indexes. This volume on space science is to be followed by annual or biannual volumes, entitled Research Trends in Space Sciences and Technology . . . A Guide to Sources of Information.

C-19 A Guide to the World's Abstracting and Indexing Services in Science and Technology. United States Library of Congress, Science and Technology Division; National Federation of Science Abstracting and Indexing Services. Washington, D. C., 1963.

Country and subject index.

C-20 Index of Technical Articles. London, 1957-1958. Monthly.

A monthly index of articles published in British technical periodicals.

C-21 International Catalog of Scientific Literature, 1902-1914. (Royal Society of London). London, 1902-1914. Annual.

Published in 14 annual issues with 17 volumes in each issue as follows: A. Mathematics; B. Mechanics; C. Physics; D. Chemistry; E. Astronomy; F. Meteorology; G. Mineralogy; H. Geology; J. Geography; D. Paleontology; L. General Biology; M. Botany; N. Zoology; O. Human Anatomy; P. Anthropology; Q. Physiology; R. Bacteriology. Each part includes an author and subject index with a list of journals covered given in the back. --Bookmark

C-22 Public Affairs Information Service Bulletin. (Public Affairs Information Service, Inc.). New York. 1945- . Weekly.

Lists articles in over 1000 journals in English, dealing with economics and public affairs. Also lists books, government documents and other materials. Listed by subject heading.

C-23 Science Citation Index. (Institute for Scientific Information). Philadelphia, 1961- . Quarterly.

An extensive computer-permuted index to scientific papers, authors, sources, the citation history of articles and concepts. The Source Index is used to identify all papers published by a specific author in the current year indexed; the Citation Index is used to find citations to any work during that period. A corporate index section identifies all citations attributed to a particular organization. International in scope.

C-24 Science, Technology, and Public Policy: A Selected Annotated Bibliography. Lynton K. Cathwell, editor. Bloomington, Indiana University, 1968.

Two volumes; one contains books, monographs and government documents, the second lists articles in periodicals. Contains fifty pages devoted exclusively to the impact of science and technology upon natural processes. With author index.

C-25 Specialized Science Information Services in the United States. Battelle Memorial Institute, Department of Economics and Information Research. Washington, D. C., 1961.

Prepared for the Office of Science Information Services of the National Science Foundation. Includes brief description of information services (scope of activity, user qualifications, sources of data collection, information services, and publications) of organizations and projects whose work indicates some degree of service beyond their own immediate organization, and whose activities provide some type of continuing information service beyond a periodic publication.

C-26 Subject Index to Unclassified ASTIA Documents. United States Department of Commerce. Washington, D. C., 1960.

ASTIA, now known as the Defense Documentation Center, or DDC, is the central storage and disseminating service for reports resulting from scientific reserach supported or sponsored by the Department of Defense. This is a subject index to the unclassified reports. It also indicates when and where reports were reprinted in the Journals. Kept up to date by U. S. Government Research Reports (See Below).

C-27 Technical Book Review. London, 1954- . Monthly.

A monthly review of scientific, medical and technical books.

C-28 Technical Book Review Index. (Special Libraries Association). New York, 1935- . Monthly.

An index to reviews in the current, scientific, technical, and trade journals. From these reviews excerpts have been taken in order to assist the reader in obtaining an accurate idea of the book. Each issue is arranged alphabetically by author; a cumulative author index is prepared annually. --Bookmark

C-29 Technical Translations. (United States Department of Commerce). Washington, D. C., 1959- . Semi-monthly.

An index to translations of the world's scientific and technical literature, collected by the Special Libraries Association (from non-governmental sources) and by the Office of Technical Services (from U. S. and foreign government sources). Supercedes the Special Library Association's publication Translation Monthly (1955-1958), which was preceded by Bibliography of Translations of Russian Scientific and Technical Literature. --Bookmark

C-30 U. S. Government Research Reports. (United States Department of Commerce, Office of Technical Services). Washington, D. C., 1946- . Semi-monthly.

This index is a monthly listing of government research reports available to industry from the Army, Navy, Air Force, Atomic Energy Commission, Office of Saline Water, and other agencies of the Federal Government. With each abstract is a note telling where a report may be obtained and its cost. Semi-annual and annual cumulative indices are available as separates. Indices are prepared for AD number, report number, subject and source. Divided into two sections: "Technical Abstract Bulletin" compiled by the DDC, and "Non-military and Older Military Research Reports."

First appeared under the title "Bibliography of Scientific and Industrial Reports" (1946-1949) and "Bibliography of Technical Reports" (1949-1954).

C-31 World Guide to Science Information and Documentation Services. United Nations Educational, Scientific and Cultural Organization. Paris, 1965.

Listing of 144 institutions representing 65 countries, concentrating mainly on national, or central centers in advanced countries, listing services at a more detailed level in areas in which scientific information work is a new activity. Scope mainly concerns the natural sciences, including agriculture and medicine; a later volume will list information and documentation services in technology.

C-32 World List of Scientific Periodicals, 4th Edition, 1900-1960. Peter Brown and George Burder Stratton, editors. Washington, D. C., Butterworths, 1963.

Covers periodicals in the natural sciences and technology published during the period 1900-1960. Arranged alphabetically by the important word of the title.

Scientific Organization and Personnel

C-33 American Manpower: 1962. A Report of the National Register of Scientific and Technical Personnel. United States National Science Foundation. Washington, D. C., 1954- . Biennial.

Analyzes education, employment, scientific specialization and other characteristics reported by almost 215,000 American scientists. The 1964 Edition covers the preceding decade.

C-34 American Men of Science; A Biographical Dictionary. 19th Edition. The Physical and Biological Sciences. Tempe, Arizona, The Jacques Cattell Press, Inc., 1960.

C-35 Directory of International Scientific Organizations, 2nd Edition. United Nations Educational, Scientific and Cultural Organization. New York, 1953.

C-36 Employment of Scientific and Technical Personnel in State Government Agencies. (United States Department of Labor, Bureau of Labor Statistics). Washington, D. C., 1961- . Biennial.

C-37 International Science Reports. United States National Science Foundation. Washington, D. C., Superintendent of Documents, various dates.

Monographs on the organization of scientific activities in foreign countries including policies, agencies, institutes, societies, universities, research in private industry; whatever is applicable to the particular country. Vol. 1: Organization of Scientific Activities in India (June, 1962); Vol. 2: Organization of Science in Germany (June, 1963).

Information is compiled from published and personal sources, communications and/or observation by the Office of International Science Activities.

C-38 National Science Policies in Countries of South and Southeast Asia. United Nations Educational, Scientific and Cultural Organization. Paris, 1965.

C-39 Organisation scientifique. (Comite-National Belge de l'Organisation Scientifique (CNBOS). Brussels, Belgium, 1927- . Monthly.

An abstracting and reporting journal.

C-40 Outline of a Plan for Scientific Research and Training in Africa. United Nations Educational, Scientific and Cultural Organization. Paris, 1964.

C-41 Scientific and Technical Personnel in the Federal Government. (United States National Science Foundation). Washington, D. C., 1958- . Biennial.

C-42 Scientific and Technical Societies in the United States and Canada. 7th Edition. National Research Council. Washington, D. C., 1961.

Standards and Specifications

C-43 ASTM Standards. (American Society for Testing Materials). Philadelphia, various dates, beginning 1916.

Seven volumes. Issues triennially with supplements in intervening years . . . . Index to standards including list of titles in numeric sequence of all ASTM serial designations. Beginning in 1964, published annually in 32 volumes.

See also: Fifty Year Index to ASTM Technical Papers and Reports, 1898-1950 (1952). Includes subject index.

C-44 Directory of U. S. Government inspection services and testing laboratories, guide for federal agencies in locating required inspection and testing services. (United States General Services Administration). Washington, D. C., 1958.

C-45 Federal Supply Classification. (United States Department of Defense, Armed Forces Support Center). Washington, D. C., Superintendent of Documents. 1960, bi-monthly supplement to 1st index.

Pt. 1: Index of specifications and standards; Pt 2: Numerical index of classes; Pt. 3: Alphabetic list.

C-46 Index of Federal Specifications, Standards and Handbooks. United States Federal Supply Service, General Services Administration. Washington, D. C., 1960.

Includes basic index and cumulative supplements as issued.

C-47 Standardization Activities in the United States. (United States Department of Commerce, National Bureau of Standards). Washington, D. C., Superintendent of Documents, 1960.

Technical Dictionaries and Encyclopedias

C-48 Bibliography of Interlingual Scientific and Technical Dictionaries, 4th Edition. (United Nations Educational, Scientific and Cultural Organization). Paris, 1961. Supplement, 1964.

C-49 A Dictionary of Scientific Terms. 7th Edition. J. E. Kenneth. Princeton, New Jersey, Van Nostrand, 1960.

C-50 McGraw-Hill Encyclopedia of Science and Technology; An International Reference Book. New York, McGraw-Hill, 1960- . Annual.

SECTION D

ATMOSPHERIC SCIENCES

The references included here are those which relate atmospheric conditions to resource problems, such as the influence of climatic conditions on agriculture and water resource activities. Complementary material will be found in sections of this bibliography dealing with climatology, climatic data, air pollution, environmental health, water resources, and hydrology.

Information systems developed through the American Meteorological Association and the National Aeronautics and Space Administration provide extensive coverage of American developments; the World Meteorological Organization, with one data center already established in North America and two planned--one in Australia and one in the U.S.S.R.--is moving toward a world-wide data gathering and information system.

Research in the atmospheric sciences which deals with the atmosphere as such will also be found by searching the literature of physics, space science and technology, aeronautics and astronautics (In this bibliography, see aeronautical engineering.). Recent developments in these fields--and in particular the Environmental Survey Satellites launched from Cape Kennedy during the beginning of 1966--have direct bearing on the above-mentioned resource problems.

Guides to Research

D-1 Climatology: Reviews of Research. United Nations Educational, Scientific and Cultural Organization. Paris, 1958.

D-2 Meteorological and Geoastrophysical Abstracts. (American Meteorological Society). Lancaster, Pa., 1950- . Monthly.

MAGA publishes abstracts in English from the important meteorological and geoastrophysical literature in every language, plus selective annotated bibliographies on subjects of interest to meteorologists, geophysicists and astrophysicists. A complete list of these bibliographies is printed in the front of each number. An index of serials and collections from which abstracts have been made together with cumulative author, subject, translation, and geographic indices are published with the December issue. Abstracts are initialed and in addition to the usual bibliographic information include symbols for the libraries having copies of the item. --Bookmark

D-3 Technical Notes. (World Meteorological Organization). Geneva, 1954- . Irregular.

Subjects of special interest to workers in Aeronautical, maritime, agriculural fields.

D-4 WMO Bulletins. (World Meteorological Organization). Geneva, 1952- Quarterly.

Reports on the work of the WMO and on recent developments in international meteorology.

SECTION E

BIOLOGICAL SCIENCES

Research in General Biology

E-1 Abstracts of Bioanalytic Technology. (American Association of Bioanalysts). Chicago, 1952- . Quarterly.

Includes abstracts, advertising, book reviews, charts, illustrations.

E-2 Abstracts of Human Development Biology. (Excerpta Medica Foundation). The Netherlands, 1961- . Monthly.

E-3 Biological Abstracts, (Biological Abstracts, Inc). Philadelphia, 1927- . Semi-monthly.

Index to the world's published and unpublished biological research literature, excluding clinical medicine beginning with 1926. Formed by the merging of Botanical Abstracts and Abstracts of Bacteriology. Each issue has a systematic subject and author index. Separate geographic and geologic indices have been dropped. Beginning with v.45, 1964, each issue (is) accompanied by its own separate subject index called B.A.S.I.C., a computer permuted title and subject index. These are to be cumulated on an annual basis. --Bookmark

E-4 Biological and Agricultural Index. (H. W. Wilson). New York, 1916- . Monthly.

Cumulative subject index to English language periodicals in biology, agriculture, and related sciences.

E-5 International Abstracts of Biological Sciences. New York-Oxford, Permagon Press, V. 24, 1962.

E-6 Proceedings. (Biological Sciences Section. Academy of Sciences of the U.S.S.R.). New York, 1962- . Bi-monthly.

Research in Biological Specialties

Botany

E-7 Excerpta Botanica. Germany. Gustaz Fischer Vertag, 1959- . From four to six issues annually, published at irregular intervals.

Section A: Taxonomica et Chorologica; Section B: Sociologica.

E-8 Proceedings. (Botanical Sciences Section. Academy of Sciences of the U.S.S.R.). New York, 1960- . Bi-monthly.

Ecology

E-9 Advances in Ecological Research. London-New York, Academic Press, 1962- . Annual.

Entomology and Zoology

E-10 Annual Review of Entomology. (Entomological Society of America) Stanford, California, Annual Reviews (publ.), V. 3, 1958. Annual.

E-11 Apicultural Abstracts. (Bee Research Association). England, 1950- . Quarterly.

E-12 Biblioteca Entomologica. Hermann A. Bagen. Leipzig, Germany, Wilhelm Englemann, 1862/1863. Two volumes in one.

Indexes the literature of entomology up to the year 1862. Arranged alphabetically by author.

E-13 Ecological Monographs. (Ecological Society of America). Durham, North Carolina, Duke University Press, 1931- . Quarterly.

E-14 Guide to the Literature of the Zoological Sciences. 7th Edition. Roger G. Smith and Reginald H. Painter. Minneapolis, Burgess Publishing Co., 1966.

E-15 Index to the Literature of American Economic Entomology. (Entomological Society of America). Melrose Highlands, Mass. V. 1-18, 1917-1962. Ceased.

This index covers the literature from 1905 through 1959. It continues the U.S.D.A. Bibliography of the More Important Contributions to American Economic Entomology, Vols. 1-8, 1890-1905 (NAI), and includes articles on economic entomology selected from pamphlets, periodicals, and books recieved in the National Agricultural Library. The geographic range covered is continental North America, Alaska through Mexico, Panama Canal Zone, Hawaii and a few publications from the Pacific Islands, Cuba, and Puerto Rico. Since 1942, items indexed here have also been indexed by the Bibliography of Agriculture. --Bookmark

E-16 Index-Catalogue of Medical and Veterinary Zoology-Authors. (United States Department of Agriculture). Washington, D. C., Parts 1-18, 1932-1952. 1952- . Annual.

This is a revision and continutation of the Index-Catalogue of Medical and Veterinary Zoology-Authors published in 1902-1912 as Bureau of Animal Husbandry Bulletin No. 39. Of particular note is the coverage of the literature on trematodes, cestodes, round-worms, and thorn-headed worms. --Bookmark

E-17 Official List of Generic Names in Zoology. Ed. by Francis Hemming for the International Trust for Zoological Nomenclature. London, 1958.

Names arranged chronologically by references to the dates of publication of the Opinions or Directions in which they were entered on the List. Alphabetic Indexes, by names and class.

See also: Official List of Specific Names in Zoology; Official List of Rejected and Invalid Generic Names in Zoology.

E-18 The Zoological Record. (Zoological Society of London). London, 1865- . Annual

One of the most important indices to international literature for all branches of zoology beginning with the year 1864. It is particularly important to the systematist seeking the original citations to new genera and species in the literature. Grouped in 19 sections (Protozoa, vermes, insecta, pisces, aves, etc.) with each section arranged alphabetically by author and having its own subject and systematic index. Publication usually two to four years behind coverage.

For literature prior to 1863, see Index Litteratureae Entomologicae, by Walther Horn and Sigmund Schenkling. Berlin, Dahlem, 1928-29. Four volumes in one.

Special Reference Works

E-19 An Annotated Bibliography on the Uses of Statistics in Ecology. Vincent Schultz. Washington, D. C., Environmental Sciences Branch, Division of Biology and Medicine, U. S. Atomic Energy Commission. 1961.

E-20 Biology and Language: an introduction to the Methodology of biological sciences, including medicine. J. H. Woodger. Cambridge, Mass., University Press, 1952.

E-21 Directory of Bioscience Departments in the United States and Canada. American Institute of Biological Sciences, J. David Lockard, editor. New York, Reinhold Publishing Co., 1967.

A listing by states of departments of colleges and universities offering courses in the biological sciences; describes major programs. Includes an index of professors in these departments.

E-22 Directory of Zoological and Entomological Specimen Collections of Tropical Institutions. United Nations Educational, Scientific and Cultural Organization. Paris, 1962.

E-23 An Ecological Glossary. J. Richard Carpenter, compiler. New York-London, Hafner Publishing Co., 1962.

SECTION F

CHEMISTRY

Abstracts, Bibliographies, Indexes

F-1 Analytical Abstracts. (Society for Analytic Chemistry). Cambridge, England, 1954- . Monthly.

A publication dealing with all branches of analytical chemistry. The volume for 1962 contains a list of journals and patents from which abstracts were taken. Annual indices are prepared for authors and subjects. In addition appropriate abstracts are taken from Chemical Abstracts, Nuclear Science Abstracts, Referatuvnyi Zhurnal (Khimiya and Biologicheskaya Khimiya), Water Pollution Abstracts, etc. Individual issues have no indices and are arranged by subjects. AA supersedes Section C of British Abstracts. --Bookmark

F-2 Bibliography of Reviews in Chemistry. (American Chemical Society). Washington, D.C., 1961- . Irregular.

This index to the review papers in chemistry duplicates to a certain extent the coverage of Chemical Abstracts. It was developed for individuals primarily interested in reviews, and, in addition, serves as an index to subject bibliographies, since most reviews include an extensive bibliography. It was formerly called Bibliography of Chemical Reviews. Beginning with volume 5, author and keyword indices are included with each issue. --Bookmark

F-3 Chemical Abstracts. (American Chemical Society). Washington, D. C., 1907- . Semi-monthly.

A comprehensive index to the world's literature in all fields of chemistry covering roughly 9,000 serial and non-serial publications. A complete list of these publications was issued as a separate in 1961 with supplements to be issued annually. This list also gives for each serial a selected number of libraries which have holdings of that title.

Internal indexes are prepared for authors, subjects, formulas and patents. Individual issues have only patent, author, and keyword indices. The keyword index which was initiated in January, 1963, uses only words from the prepared abstracts. These internal indexes have been cumulated into volumes as follows:

cont'd

F-4

FOR THE PERIOD Annual	COVERAGE Author, Subject, Patent & Formula except during the early years.
1907-1916	Authors and Subjects
1917-1926	Authors and Subjects
1927-1936	Authors and Subjects
1907-1936	Patents
1937-1946	Authors and Subjects
1920-1946	Formulas
1937-1946	Patents
1947-1956	Authors, subjects, patents, formulas

All decennial indexes have now been discontinued in favor of five year cumulations.

Chemical Abstracts was preceded by the Review of American Chemical Research founded in 1895 as a supplement to MIT's Technology Quarterly. From 1897-1902, vol 3-8, the Review was published as part of the Journal of the American Chemical Society.

F-5 Chemical Titles. (American Chemical Society). Washington, D. C., 1960- . Bi-weekly.

This publication of the Chemical Abstracts Service is intended to serve as a current awareness device rather than as a retrospective searching device. Each issue of this computer-generated index is divided into three parts: (1) and index consisting of keywords from each title arranced with the journals listed alphabetically down the center of the column; (2) a numbered listing of the contents of each journal arranged with the journals listed alphabetically by title. and (3) an author index. Articles selected from approximately 600 journals of pure and applied chemistry (including chemical engineering). This index duplicates the coverage of Chemical Abstracts and will be discarded when the cumulated subject indices are published.

F-6 Chemisches Zentralblatt. (Akademie-Verlag). Berlin, 1830- . Weekly.

An abstracting journal.

F-7 Current Chemical Papers. (The Chemical Society). London, 1964- . Monthly.

This index is to inform chemists of new work and shoulc not be thought of as replacing the abstracting journals. No internal indices; arrangement is by broad subject; inorganic, organic, electrochemistry, colloids, surface properties, kenetics and mechanism, etc. Gives the language of the original reference.

F-8 Proceedings. Chemistry Section. (Academy of Sciences of the U.S.S.R.). New York, 1956- . Bi-monthly.

Special Reference Works

F-9 Handbook of Chemistry and Physics: A Ready Reference Book of Chemical and Physical Data. (Chemical Rubber Company). Cleveland, Ohio, 1913- Annual.

F-10 How to Find Out in Chemistry. Charles Raymond Burman. Long Island City, New York. Permagon Press, 1965

F-11 Index Chemicus. (Institute for Scientific Information). Philadelphia, 1960- . Monthly.

A register and index of new chemical compounds, reporting within 30 days after their appearance in the primary journals.

N.B. A list of pamphlets on nomenclature available from the American Chemical Society is published inside the front cover of Chemical Abstracts.

SECTION G

EARTH SCIENCES

Geography

G-1 Annals. (Association of American Geographers). Washington, D. C., 1911- . Quarterly.

A scholarly journal, including abstracts and bibliographies, charts and maps, statistics.

G-2 Annotated World List of Selected Current Geographical Series in English. Chauncy D. Harris. Chicago, University of Chicago, Department of Geography, 1964.

Research Paper No. 96.

117 entries.

G-3 Bibliographie Cartographique Internationale. (Published under the auspices of the Comite National Francais de Geographie and the International Geographic Union in cooperation with UNESCO and the Centre National de la Recherche Scientifique). Paris, Armand Colin, 1948- . Annual.

Guide to official and other maps, new and re-edited, appearing during the year; publication is usually two years behind coverage. Arranged by geographic unit (state, region, continent, etc.) and internally by subject. Names of geographic units are given in French, but map titles are given in the language in which they appeared. Indexed by author, publisher, and subject.

G-4 Bibliographie Geographique Internationale. Association de Geographes Francais. Paris, 1962.

Covers approximately 12,000 periodicals. Lists articles both of a general nature and those relating to specific topics. In French.

G-5 Bulletin. (Special Libraries Association. Geography and Map Division). Boston, Massachusetts, 1962- . Monthly.

Additions to the Research Catalog (See below).

G-6 Documentatio Geographica. (Institute fur Landeskunde). Bad Godesburg. West Germany, Bundesforsch Ungsanstalt fur Landeskunde und Raumordnung. 1967- . Annual.

An international index to papers in periodicals and serials in the field of geography, consisting of a yearly title and yearly register volume. Indexing system uses the Universal Decimal Classification notation.

G-7 A Glossary of Geographical Terms. L. Dudley Stamp, editor. London, British Association for the Advancement of Science). 1961.

G-8 L'Information Geographique. (J. B. Balliere et Fils). Paris, 1936- . Five times a year.

A bulletin including abstracts, bibliographies, book reviews, charts, maps, and statistics.

G-9 International List of Geographical Series. Chauncy D. Harris and Jerome D. Fellman. Chicago, University of Chicago, Department of Geography, 1960.

Research Paper No. 63.

Includes 1697 entries, arranged by country and printed in the language of that country. Non-Latin alphabets are given in both original and Latin letters. Not annotated. The introduction is particularly useful for locating further sources.

G-10 New Geographical Literature and Maps. (Roval Geographical Society). London, 1951- . Semi-annual.

G-11 Research Catalog. American Geographical Society. Boston, Massachusetts, G. K. Hall & Co., 1962.

A photocopy of the classified card catalog of the AGS; a "distillation of nearly four decades of searching the geographical literature of the world," containing over 219,000 entries. The system of classification, by area and subject, is fully explained at the beginning of each volume. Supplemented by Current Geographical Publications (See above)

G-12 Soviet Geography: Review and Translation. (American Geographical Society). New York, 1960- . Monthly September-June.

Designed to make available in English reports of current Soviet research in geography. --Subtitle

G-13 United States Government Publications for Research and Teaching in Geography and Related Social and Natural Sciences. Ada G., and Clarence L. Vinge. Totowa, New Jersey, Littlefield, Adams and Co., 1967.

List about 3500 government publications since 1945 which deal with geography, geology, ecology, demography, and other fields. Contains a separate list of bibliographies and serials, and a title and subject index.

Geology and Geoscience

G-14 Abstracts of North American Geology. (United States Department of the Interior, Geological Survey). Washington, D. C., 1966- . Monthly.

Contains abstracts of technical papers and books and citations of maps on the geology of all of North America plus island possessions of the United States.

G-15 Annotated Bibliography of Economic Geology. (National Research Council). Lancaster, Pa., 1929- . Semi-annual.

An index to world literature of economic geology, covering such subjects as: water supply, petroleum, metals, coal, non-metals, geophysical investigations, engineering geology, etc. Most of the abstracts for foreign titles were taken from the Bibliography and Index of Geology Exclusive of North America (See below). A list of serials indexed is given in the front of each issue; there is a cumulative index to the first 25 volumes. --Bookmark

G-16 Bibliography and Index of Geology. (Geological Society of America). Washington, D. C., 1969- . Annual.

Formerly Bibliography and Index of Geology Exclusive of North America. 1934-1969.

Now international in scope.

G-17 Bibliography of North American Geology. (United States Geological Survey). Washington, D. C., 1906- . Various dates, now annual.

This series is a continuation of: Geologic Literature of North America. 1785-1918. by John M. Nickles (U.S.G.S. Bulletins 746-747, 1923-1924), which is itself a cumulation of Bibliographies of North American Geology (U.S.G.S. Bulletins 44, 75, 91, 127, 130, 135, etc.).

This series continues the earlier work by Darton and Mickles. BNAG covers publications on the geology of the United States, Alaska, Hawaii, the rest of the North American continent, Greenland, West Indies, Guam, and other Pacific Island possessions, but not the trust territories of the United States. Articles by American Authors published in foreign journals are cited only if they deal with North American localities. Articles on North America by foreign authors are included regardless of the place of publication. Articles of a general nature are included only if they appear in North American journals. Citations are listed alphabetically by author and are followed by a subject index. --Introduction (Bookmark)

G-18 Catalog of Published Bibliographies in Geology, 1896-1920. Edward Bennett Mathews. Washington, D. C., National Research Council of the National Academy of Sciences, 1923.

G-19 Geologic Names of North America. Druid Wilson. Washington, D. C., United States Department of the Interior, Geological Survey, 1959.

Gives references to the first use of each formation name for any section of the country. Check volume for date of publication of earlier references.

G-20 A Geological Map of Africa. United Nations Educationa, Scientific and Cultural Organization. Paris, 1963.

Natural Resources Research III.

A series of nine maps, including an explanatory brochure.

G-21 Geologisches Zentralblatt. Verlag von Gebruder Borntraeger, Berlin, 1901-1942. Ceased.

Beginning in January, 1932, divided into two parts: Abteilung A: Geologie; Abteilung B: Palaeontologisches Zentralblatt.

In 1943 merged with Neues Jahrbuck fur Mineralogie Geologie und Palaontologie.

G-22 Geoscience Abstracts. (American Geological Institute). Washington, D. C., 1959- . Monthly.

This is the most up-to-date of the general indexes devoted exclusively to geology. It covers nearly 1,000 serials, books, and other publications, and includes an author index in the back of each issue, with annual subject index. GSA attempts complete coverage of all significant literature in geology, solid earth geophysics, and related areas of science which has either been published in North America or deals with North America. It also includes abstracts of Soviet literature which have been translated and published in North America. A list of serials indexed is given in the 1963 indices. --Bookmark

A continuation of Geological Abstracts (1953-1958).

G-23 A Guide to Information Sources in Mining, Minerals and Geosciences. R. Stuart Kaplan, editor. New York, Wiley and Sons, 1965.

G-24 An Index of State Geological Survey Publications Issued in Series. John B. Corbin. New York, Scarcrow Press, 1965.

G-25 An Index to Reports of Geological Survey of Canada from 1927-1950. J. F. Wright, comp. Ottawa, Queen's Printer and Controller of Stationary, 1962.

This index is the sixth of a series issued by the Geological Survey of Canada which cover GSC publications beginning with 1843. It includes memoirs, economic geology series, geological bulletins, Museum bulletins, Summary Reports, Annual Reports, Preliminary Paper, Geological Maps, Water Supply Papers and Geophysics Papers of the Survey.
--Bookmark

G-26 Lexicon of Geologic Names of the United States for 1936-1960. Grace C. Kerother, et. al. Washington, D. C., United States Department of the Interior, Geological Survey, 1966.

This is the sixth such compilation published by the Geological Survey since 1902. Contains 14,634 names of geologic formations in the United States and all its possessions plus a description of the formation as described in statigraphic papers published in 1936-1960.

G-27 Marine Geology. (Elseivier Publishing Co.). Amsterdam. Netherlands. 1964- . Eight to Twelve times a year.

Text in English, French, and German. Includes abstracts, bibliographies, and book reviews, charts and illustrations, index.

G-28 Proceedings. (Academy of Sciences of the U.S.S.R. Earth Sciences Section). Washington, D. C., American Geological Institute, 1960- . Bimonthly.

G-29 Publications of the Geological Survey. United States Department of the Interior, Geological Survey. Washington, D. C., 1963.

This publication contains a complete list (to date) of U.S.G.S. annual reports, monographs, professional papers, bulletins, water-supply papers, circulars, chapters and volumes of Mineral Resources of the United States (1882-1923), folios of the Geologic Atlas of the United States and the World Atlas of Commerical Geology. Includes maps and charts published by the Survet. This listing is revised every five years. In the intervening years, annual and monthly supplements keep it up to date. --Introduction A finding list for authors, states, areas, and subjects is given in the back of the five-year cumulations. --Bookmark.

See also Geology, Price list #15 (Superintendent of Documents).

G-30 Zentralblatt fur Geologie und Palaeontologie. (Schweizerbart Verlagsbuchhandlung). Stuttgart, Germany, 1950- . Six times a year.

Supercedes in part the Neues Jahrbuch fur Mineralogie, Geologie und Palaeontologie. Teil I: Allgemeine und Angewandte Geologie; Teil II: Historische Geologie, Palaeontologie.

A general index to the international literature covering the earth sciences. Part I includes meteorology, oceanography, geochemistry, etc., in addition to the more familiar areas of sedimentation and geomorphology. Particular emphasis is placed on economic or applied geology with large sections on petroleum, mining and ore deposits, ground water, and regional geology. Teil II covers historical eology and palaeontology. The parts of Teil I and II are arranged by subject and have cumulated indices. --Bookmark

G-31 Geophysical Abstracts. (United States Department of the Interior. Geological Survey). Washington, D. C., 1929- . Quarterly.

G-32

GA includes abstracts of technical papers and books, but not dissertations, opern file reports or memorandums. on the physics of the solid earth, the application of physical methods and techniques to geological problems, and geophysical exploration. List of the journals indexed appear in GA no. 160 and no. 184 (Bulletin 1146-A, 1961); supplements to this list appear in each issue since then. --Introduction

GA nos. 10-86 were issued in mimeographed form by the U. S. Bureau of Mines as Information Circulars. On July 1, 1936, the geophysical section was transferred to the Geological Survey, which issued nos. 87-111. On October 5, 1942, by departmental order, the geophysical work was again placed with the Bureau of Mines, and nos. 112-127 were issued by that Bureau as Information Circulars. On July 1, 1947, GA was transferred back to the Geological Survey where it has remained. GA nos 87-111 and nos. 128 to date were issued as U.S.G.S. Bulletin nos. 887,895. 909, 915, 925, 932, 939, 957. 959, 966, 976, 981. 991, 1002. 1022. 1033, 1048, 1066, 1086. 1106. 1116, 1146. 1166. Beginning in January. 1963, GA no longer has U.S.G.S. Bulletin numbers.

The reader should also note the abstracts section of the journal Geophysics, which consists of abstracts taken from the English edition of Izvestia and from Geophysical Prospecting. The Transactions of the American Geophysical Union has a list of the contents from various Russian journals plus a list of "English Translations of Russian and Other Scientific Papers and Journals" in each issue. The Official Journal of the European Association of Exploration Geophysicists, Geophysical Prospecting, has had the "E.A.E.G. Abstract Service" since 1953. containing abstracts of papers published in selected European journals. A "Bibliography of Graduate Theses on Geophysics in U. S. and Canadian Institutions" was compiled by George E Tarbox and published in the Quarterly of the Colorado School of Mines. 53: 1-55. for January. 1958. In addition. the Society of Exploration Geophysicists published in 1963 a Cumulative Index to the Publications of the Society from 1931 through 1961 which will be helpful in a literature search. --Bookmark

G-33 International Geophysical Year Bibliography of Literature Published in Russian in 1960. National Aeronautics and Space Administration, Washington, D. C., 1963.

NASA Technical Translation F-109.

This bibliography is the fourth issue of the publication entitled "International Geophysical Year. Bibliography of Literature in Russian." The first issue of the bibliography (1954057) contained references to 450 publications, the second (1958) to 625 publications, and the third (1959) to about 800 publications. The present issue contains about 1,200 references to publications issued in 1960. --From the translated Foreword to the above. So far as the author can determine only 20 of these have been translated into English. --Bookmark.

G-34 Quarterly Checklist of Geophysics. (American Bibliographic Service). Darien, Connecticut, 1960- . Quarterly.

Current books, monographs, brochures, separates.

G-35 United States IGY Bibliography, 1953-1960. National Academy of Sciences--National Research Council. Washington, D. C., 1963.

Covers United States participation in the International Geophysical Year from its inception to its results, with particular coverage of all United States projects. The 2,853 abstracts cover material published from 1953 through 1960. --Bookmark

Other

G-36 Bibliography on Snow, Ice, and Permafrost. (Library of Congress). Washington, D. C., 1951- . Annual.

The aim of the bibliography is to provide up-to-date and exhaustive coverage of the literature on glaciology, cold regions research, and the science, engineering and geography of snow, ice and frozen ground. This includes such diverse subjects as avalanche forecasting, snow removal techniques and equipment, the design of snow vehicles, the growth of ice crystals, frost effects on soils, etc. --Introduction

Indexes journal articles, reports, patents, society publications, conference proceedings, symposia, theses, etc. For each item gives the bibliographic information, an abstract and a code designating a library containing the item.-- Bookmark

G-37 Data of Geochemistry. 6th edition. F. W. Clarke. Washington, D. C., 1960.

United States Geological Survey Bulletin, no. 330.

G-38 Geochemical Prospecting Abstracts. (United States Department of the Interior Geological Survey). Washington, D. C., 1953- . Irregular.

Taken from world literature covering the geochemical methods of prospecting for minerals. References on general geochemistry of geochemical prospecting for petroleum are not included. GPA was issued as follows: U.S.G.S. Bulletin 1000 A covers all published references available as of July 1, 1952. U.S.G.S Bulletin 1000 G covers the period July 1952-December 1954. U.S.G.S. Bulletin 1098 B covers the period January 1955-June 1957. Note that there is some overlap with later Bulletins picking up earlier work not previously recorded. --Bookmark

G-39 Geomorphological Abstracts. (London School of Economics). London. 1960- . Bi-monthly.

Author and regional index appears annually; subject index every four years.

G-40 Manual of Photographic Interpretation. American Society of Photogrammetry. Washington, D. C., 1960.

SECTION H

MATHEMATICS AND CYBERNATION

H-1 An Index of Mathematical Tables. 2nd Edition. A. Fletcher, et. al. Reading Massachusetts, Addison-Wesley Publishing Company, 1962.

A selective index to mathematical tables. Does not include tables in the theory of numbers or tables contining experimentally determined numbers. Consists of 4 parts: Part 1--Index according to functions; Part II--Bibliography; Part III--Errors; Part IV--Index to introduction and Part I. Some material dated as recently as 1960-61 has been included but the majority of the references are dated 1958-59 or earlier. Readers interested in locating tables published after these dates should consult Mathematical Reviews and Mathematics of Computation. This latter has a section in each issue titled, "Reviews and Descriptions of Tables and Books." --Bookmark

H-2 Index of Mathematical Tables from All Branches of Sciences, Karl Schuette. Munchen, Germany, R. Oldenberg, 1955.

A bilingual index to place of publication for roughly 1,200 tables. Includes tables of interest to the mathematician, engineer, physicist, chemist, mineralogist, biologist, astronomer, geologist, and meteorologist. --Bookmark

H-3 Mathematical Reviews. (American Mathematical Society). Providence, Rhode Island, 1940- . Monthly.

An index to the world's mathematical literature both serial and monographic. Each issue is arranged by subject and has only an author index. Individual issues now have a cumulated author index at six month intervals and a table of contents which serves as a subject index. This is a list of headings with code numbers under which articles were classified in that particular volume. A list of the abbreviations of names of journals indexed is to be found with the index for Volume 26, July to December. --Bookmark

H-4 Quarterly Check-List of Mathematica. (American Bibliographic Institute). Darien, Connecticut, 1961- . Quarterly.

H-5 Theoretical Cybernetics Abstracts. (Scientific Information Constultants, Ltd.). London, 1964- . Monthly.

Translations of "Referativnyi Zhurnal-Matematika."

H-6 Zentralblatt fur Mathematik und Ihre Grenzegebiete. (Springer Verlag). Berlin, 1931- . Monthly.

An international index to published literature in the fields of algebra, number theory, analysis, theiry of probabilities, geometry, topology, theoretical physics, astromony, astrophysics, and geophysics. Abstracts are in German, Italian,,French, and English, and state the language of the original when it is written in another language. Cumulated index published annually. --Bookmark

SECTION I

PHYSICS

Abstracts and Bibliographies

I-1 Dissertations in Physics: Bibliography of all Doctoral Theses Accepted by American Universities, 1961-1959. M. Lois Markworth. California, Stanford University Press, 1961.

I-2 Quarterly Checklist of Physics. (American Bibliographic Institute). Darien, Connecticut, 1960- . Quarterly.

I-3 Science Abstracts: Section A. Physics Abstracts. (Institution of Electrical Engineers). London, 1898- . Monthly.

This index is compiled for the physicist and covers the world's serial literature in such fundemental areas as heat, optics, fluids, electricty, biophysics, nuclear physics, geophysics, astrophysics, solid-state physics, physical chemistry, atomi and molecular physics, etc. Monthly issues have only an author index plus a supplementary list of the journals abstracted.

Special Reference Works

I-4 Encyclopaedic Dictionary of Physics. J. Thewlis, ed. New York, Permagon Press. 1961-64.

I-5 Handbuch der Physik. S. Flugge, ed. Berlin, Springer-Verlag, 1955-1963.

I-7 Pure and Applied Physics. E. E. Schnieder, ed. New York, Academic Press. v. 1-29. 1957-1968.

I-6 International Dictionary of Physics and Electronics. 2nd Edition. Walter C. Michels, ed. Princeton, New Jersey, Van Nostrand, 1961.

SECTION J

SOCIAL SCIENCES

J-1 American Economic Review. (American Economic Association). Princeton, New Jersey, 1911- . Quarterly.

The official organ of the American Economic Association. A quarterly review of economic research and thought, publications, meetings, etc. See also supplements, proceedings, handbooks.

J-2 The Annals of the American Academy of Political and Social Science. (American Academy of Political and Social Science). Philadelphia, 1890- . Bi-monthly.

Includes bibliographies, book reviews; contians some of the leading social science thought.

J-3 Bibliography of Social Science Periodicals and Monograph Series. United States Department of Commerce, Bureau of the Census. Washington, D. C., 1961- .

Each volume, when the series is completed, will cover, to the fullest extent possible, all periodical and monograph series devoted primarily to the social sciences published since 1950 in the so-called difficult languages of the Communist bloc and other countries (Albania, Bulgaria, Germany (Soviet Zone), Greece, Hong Kong, Hungary, Iceland, Japan, Korea (North and Republic of), Norway, Poland, Rumania, Sweden, Turkey, U.S.S.R. and Yugoslavia).

J-4 Current Projects on Economic and Social Implications of Science and Technology. (United States National Science Foundation). Washington, D. C., 1959- . Annual.

Directory lists name of investigator, study, university or sponsoring agency, and brief synopsis of the project. Includes appendix on status of projects reviewed in the preceeding issue.

J-5 A Dictionary of the Social Sciences. J. Gould and W. L. Kolb, editors. New York. Free Press of Glencoe, 1964.

Compiled under the auspices of UNESCO as one of the first in a series of unilingual dictionaries. "The purpose of the volume is twofold: to afford the reader a general introduction to the main problems and developments occuring in the domain of the social sciences, and to provide for specialists in other disciplines a source of understanding of the main concepts used in fields outside their own." --Foreword

J-6 Directory of Information Sources in the United States: Social Sciences. United States Library of Congress, National Referral Center for Science and Technology. Washington, D. C., 1965.

Companion volume to Directory of Information Resources in the United States: Physical Sciences, Biological Sciences, Engineering (Section C).

J-7 Economic Abstracts. (Library of the Economic Information Service. Ministry of Economic Affairs). The Hague, 1953- . Semi-monthly.

Abstracts on economics, finance, trade and industry, management and labor. Text in Dutch, English, French, German: Dutch abstracts summarized in English.

J-8 Human Organization. (Society for Applied Anthropology, New York State School of Industrial and Labor Relations). Ithaca, New York. Cornell University, 1941- . Quarterly.

A scholarly journal of interdisciplinary inquiry.

J-9 Input-Output Bibliography, 1960-1964. United Nations, Statistical Office. New York. 1964.

Annotated international bibliography of journal articles, books, monograph series, etc., obtained from other abstracting sources and through direct contact with the editors, on theoretical structure, mathematical and computational techniques, classification systems and aggregation problems, geographic studies, etc. Author/issuing agency index.

J-10 International Bibliography of Public Administration. United Nations, Technical Assistance Programme. New York. 1957.

Document is a "working list of suggested titles," rather than a comprehensive bibliography. Includes workds in English, French, Spanish, German; individual authors as well as government publications. Includes a section on land and natural resources, public works, etc. Is an expanded version of the 1953 edition.

J-11 International Bibliography of the Social Sciences. (International Committee for Social Sciences Documentation). London, Tavistock Publications; Chicago, Aldine Publishing Co. 1951- . Annual.

In four parts: International Bibliography of Sociology (from 1951); International Bibliography of Political Science (from 1952); International Bibliography of Economics (from 1952); International Bibliography of Social and Cultural Anthropology (from 1955).

Devoted to coverage of the most important international publications (books, articles in periodicals, reports, etc., not including unpublished material) in the area of social and cultural anthropology, etc. Special attention is given to the official publications of governments. Headings, indices, and introductory material are bilingual (French/English). A list of periodicals consulted, as well as subject and author indices are given in each issue.

J-12 International Economic Review. (The Kansai Economic Federation). Osaka, Japan, 1960- . Three numbers a year.

The organ of the International Economic Association.

J-13 International Index (Social Sciences and Humanities Index). H. W. Wilson. New York, 1907- . Quarterly.

Beginning Vol. 53, No. 1 (June, 1965), entitled Social Science and Humanities Index.

An index to English-language publications, including journals, magazines, books, etc.

J-14 International Review of Administrative Sciences. (International Institute of Administrative Science). Brussels. Belgium, 1928- . Quarterly.

J-15 Man: A Record of Anthropological Science. (Royal Anthropological Institute). London, 1901- . Monthly.

J-16 Psychological Abstracts. (American Psychological Association). Lancaster, Pa., 1927- . Monthly.

An index to the world's literature on animal, educational, industrial, abnormal, experimental, physiological, developmental and social psychology, personality, abilities, therapy and guidance. Single issues have an author index. A list of journals abstracted, a list of abstractors and their addresses, together with a cumulated author and subject index are issued annually. Preceeded by Psychological Index (1895-1936).

J-17 Publications of the Social Science Department, 1948-1965; The Rand Corporation. Ian C. C. Graham, Bonnie Lief. for the Defense Documentation Center. United States Department of Commerce. Santa Monica, California. The Rand Corporation, 1965.

Bibliography of unclassified books, reports, Rand Memoranda, papers and translations, including those out of print. Replaces earlier indexes. Arranged alphabetically by author. Includes information on depositories and how publications may be obtained.

J-18 Quarterly Checklist of Economics and Political Science. (American Bibliographic Institute). Darien Connecticut, 1958- . Quarterly.

Current books, monographs, brochures, separates.

J-19 Quarterly Checklist of Ethnology and Sociology. (American Bibliographic Institute). Darien, Connecticut, 1958- . Quarterly.

Current books, monographs, brochures, separates.

J-20 Sociological Abstracts. (Sociological Abstracts, Inc.,). New York, 1960- . Eight times a year.

Between 1952 and 1958, published quarterly; 1959-1960, five times a year.

Abstracts of world literature on sociology, including methodology and research technology, history and theory, social psychology, group interactions, culture and social structure, complex organizations, social change and economic development, mass phenomena, political interactions, demography and human biology, community development and rural sociology, etc. List of journals scanned are given at the end of each section.

J-21 Sources of Infromation in the Social Sciences: A Guide to the Literature. Carl M. White and Associates. New Jersey, Badminster Press, 1964.

Outlines the major elements and personalities forming the disciplines of thinking in the social sciences, the development of concepts, central readings, and sources of further information.

SECTION K

ENGINEERING

General and Miscellaneous

K-1 Abstracts of Photographic Science and Engineering Literature. (Columbia University. Department of Graphics and The Society of Photographic Scientists and Engineers). New York, 1962- . Monthly.

Gives informative abstracts for all scientific and technical papers ans patents containing new information in the fields of photographic science, engineering and technology. This journal is limited to the photographic processes and their scientific and engineering applications but will overlap areas directly or indirectly related to photography, such as electronics. Continues the Kodak Monthly Abstract Bulletin now defunct. A list of the journals covered and their abbreviations is given in volume 1, number 1. Annual indices are prepared for authors and inventors, patents, and subjects. -- Bookmark

K-2 Engineering Index. (Engineering Index, Inc). New York, 1884- . Annual from 1906, monthly from 1962.

An important index to that portion of the world's engineering literature recieved by the Engineering Societies Library. It is arranged by subject with an author index. For each entry there is a brief descriptive annotation. The list of items covered includes the professional and trade journals, publications of engineering societies, independent laboratories, research institutions and government documents. It also covers many non-serial publications as well as selected books. It does not cover patents. This index is also published on cards but these are not available at Idaho.

Recommended reading: Herling, John P. "Engineering Abstracting Services," Special Libraries. 52: 560-565. December, 1961. --Bookmark

K-3 Fire: A Summary of Literature in the United States from the mid 1920's to 1966. Charles T. Cushwa. Asheville, North Carolina, Southeastern Experiment Statior, 1968.

Lists references dealing with forest, range, and shrub fires under vegetation types. Includes the categories of ecological succession, economics, history, nutrition and soil. Over 800 references.

K-4 Fire Research Abstracts and Reviews. (Committee on Fire Research and the Fire Research Conference of the National Academy of Sciences-National Research Council). Washington, D. C., 1958- . Three times a year.

Coverage is limited to articles of significance in fire research, centered on the quantitative understanding of fire and its spread. FRAR will abstract papers published in scientific journals, progress reports of sponsored laboratories. At intervals, reviews on subjects of particular importance are published. Arranged by subject as follows: ignition, phenomena, thermal decomposition, heat and material transfer, diffusion flames, combustion principles, ratiation, suppression of combustion, model studies, atomization of liquids, meteorological interaction, operational research principles, instrumentation and fire fighting techniques, equipment design, ets. --Bookmark

K-5 List of Publications on Fire Performance. United States Department of the Interior, Office of the Forest Service, Forest Products Laboratory. Washington, D. C., 1967.

Includes publications which five general information and results of research by the Forest Products Laboratory on fire test methods, fire-retarding chemicals and treatment, and fire behavior of treated and untreated wood, wood products, and wood structure.

K-6 Science Abstracts: Section B. Electrical Engineering Abstracts. (Institution of Electrical Engineers). London, 1903- . Monthly.

An index covering all aspects of the world's electrical engineering literature: power generation and utilization, mathematics, instrumentation and measurements, materials, telecommunication, control data processing, electro-technical devices, electronics, electromagnetic waves and oscillations, ets. Each issue includes an author index and when appropriate a conference index. Bound volumes have cumulated author and subject indices with a list of subject headings used by the index. Users should read the introductory paragraphs to both the subject and the author index before attempting their use. A list of the journals indexed is given in volume 62 (1959). This list is kept up to date by supplements in the individual issues.

Recommended Reading: Milek, J. T. "Abstracting and Indexing Services in Electronics and Related Electrical Fields," American Documentation. 8: 5-21. January, 1957.--Bookmark

K-7 Thesaurus of Engineering and Scientific Terms. United States Department of Defense. Washington, D. C., 1967.

A thesaurus containing a permuted index, a subject catagory index, a hierarchical index, and a list of thesaurus rules and conventions.

Aerospace

K-8 Aero-Space Engineering Index. (Institute of the Aeronautical Sciences). New York, 1960- . Annual

Continuation of Aeronautical Engineering Index, 1947-1960.

K-9 Air University Library Index to Military Periodicals. (United States Air University). Maxwell Air Force Base, Alabama, 1949- . Quarterly.

K-10 Bibliography of Aeronautics(1909-1932). United States National Advisory Committee for Aeronautics. Washington, D. C.. 1921-1936.

Continues Bibliography of Aeronautics Prior to June 30, 1909, by P. Brockett (Washington, D. C., Smithsonian Institution, 1910. Smithsonian Miscellaneous Collection Vol. 55).

K-11 Index Aeronauticus: A Review of Technical Information. (Great Britain, Ministry of Supply). London, 1945- . Monthly.

K-12 Index of NACA Technical Publications. (National Advisory Committee for Aeronautics). Washington, D. C., 1915-September, 1958. Annual.

Subject index to the declassified NACA Technical Publications issued since the origin of the Committee in 1915 through September, 1958. Each volume has an author and subject index. The Index of NACA Technical Publications was continued by the Index of NASA Technical (Oct. 1958-June 1960)1 the Index of NASA Technical Publications (July, 1960-Dec. 1961); NASA Technical Publications Announcements (November, 1958-December 1962); and Scientific and Technical Aerospace Reports.

The Index of NASA Technical Publications, July 1960- December 1961 is the last one issued. It was replaced beginning with vol 2, April 12, 1962, by the expanded and revised Technical Publications Announcements, July 1960-Dec. 1961 which is NASA's announcement and index journal. TPA lasted until January, 1963, when it was replaced by Scientific and Technical Aerospace Reports. TPA listed, in addition to formal NASA reports, documents resulting from NASA supported investigations, and non-NASA reports having significance to NASA scientific and technical programs. This enlarged TPA has four internal indexes: subject, personal author, corporate source, and report number. These were published on a current basis and were regulatly cumulated. --Bookmark

K-13 International Aerospace Abstracts. (National Science Foundation). Phillipsburg, New Jersey , 1961- . Semi-monthly.

Published by the Technical Infromation Service, American Institute of Aeronautics and Astronautics.

IAA indexes the world's published literature in the field of aeronautics, space science and technology. Covers periodicals, books, meeting papers, conference proceedings, symposia and translations. IAA supplements the coverage of STAR which indexes the unpublished report literature. IAA is arranged in two major sections: abstracts and their indices (subject, personal author, report number and accession number). A corporate author index is published in the cumulative indices which are prepared on a quarterly, semiannual and annual basis. IAA was formerly published as part of the journal Aero/Space Engineering through December, 1960.

The reader should also note Space Science and Technology Books, 1957-1961: A Bibliography with Contents Noted which will help in locating material before 1961. This bibliofraphy was issued by the Library of Congress in 1962 and consists of a list of space books published throughout the world for the years 1957-1961. It does not include Congressional Committee

K-14 International Aerospace Abstracts. (con't)

hearings, books dealing with aeronautics, military rocketry or rocket programs and publications on atomic energy, patents, technical reports and works under 50 pages in length. Author and subject indices are [illegible] --Bookmark

K-15 List of Selected Re erences on NASA Programs. National Aeronautics and Space Administration. Washington, D. C., 1962.

This is a list of selected publications and releases of NASA during the three years following the Agency's establishment in October, 1958. Section I contains all NASA Technical Reports, Technical Notes and Technical Translations, and technical articles having NASA sponsorship and published in scientific journals; Section II contains selected NASA releases, speeches, and general informational and educational publications; Section III contains Congressional documents relating to NASA activities--Introduction. -- Bookmark

K-16 Satellite Situation Report. (U. S. National Aeronautics and Space Administration). Washington, D. C., 1968- . Semi-monthly.

Put out by the Goddard Space Flight Center, Operation Control Center.

K-17 Scientific and Technical Aerospace Reports. (National Aeronautics and Space Administration). Washington, D. C., 1963- . Semi-monthly.

STAR continues the scope, coverage, and format of its predecessor Technical Publications Announcements, and as such is a comprehensive abstracting service devoted solely to literature bearing on the science and technology of aeronautics and space. It covers: (1) scientific and technical reports of NASA and its contractors; (2) scientific and technical reports of government agencies, universities, and industrial and independent research organizations in the U. S. and abroad; (3) scientific and technical articles prepared by NASA and its contractors which appear in learned and technical journals.

By special arrangement between NASA and the Institute of Aerospace Sciences, the abstract journal International Aerospace Abstracts is issued in coordination with STAR, each journal appearing on alternate weeks. IAA covers books, periodicals, and other such media usually considered to be "published" literature. Both IAA and STAR use identical subject catagories and indexes. Together these two provide comprehensive access to the unclassified report and published literature of current significance to aerospace science and technology. STAR is arranged in two major sections. The first contains the bibliographic citations with

K-18 Scientific and Technical Aerospace Reports. (con't.)

the abstracts and is arranged by appropriate subject categories. The se second section consists of five indices as follows: Subject, Corporate Source, Personal Author, Report Number and Accession Number. Cumulative indices are published quarterly, semiannually and annually. The reader should also note the Contract Number Index to Reports Announced in STAR. This is a cumulative index to items in TPA vol 2 and STAR vol. 1, 1962-1963. --Bookmark

Special References

K-19 Aeronautical Engineering Catalog. (Institute of the Aeronautical Sciences). New York, 1944- . Annual.

K-20 AGARD Aeronautical Multilingual Dictionary. North Atlantic Treaty Organization, Advisory Group for Aeronautical Research and Development. New York, Permagon Press, 1960.

K-21 Aviation and Space Directory, 4th Edition. E. J. Gentle and E. C. Chapel. Los Angeles, Aero Publishers, 1961.

K-22 Handbook of Aeronautics, 4th Edition. Council of the Royal Aeronautical Scoiety. New York, Pitman, 1952-54.

K-23 World Aviation Directory. (Amweican Aviation Publications). Washington, D. C. 1940- . Semi-annual.

Ceramic

K-24 Ceramic Abstracts. (American Ceramic Society). Columbus, Ohio, 1922- . Monthly.

Covers journal articles, society proceedings, books and patents in the field of ceramics and is published initially as part of the Journal of the American Ceramic Society. Once a year these abstracts are removed from the Journal and bound separately, with their own author and subject index.

K-25 Ceramic Data Book. (Industrial Publications, Inc.). Chicago, Illinois, 1921- . Annual.

K-26 Industrie Ceramic. (Societe Francaise de Ceramic). Paris, Societe des Editions Scientifiques, Techniques et Artistiquest, 1946- . Monthly.

Abstracts, charts and illustrations, patent and trade literature.

K-27 Keramische Zeitschrift. Freiburg, Germany. G. Schmid, Publ., 1948- . Monthly.

K-28 Progress in Ceramic Science. New York, Permagon Press, 1961- . Annual.

Chemical

K-29 Chemical Market Abstracts. (Foster and Snell, Inc.). New York, 1950- . Monthly.

Includes market, patent and trade information as well as market abstracts.

K-30 International Chemical Engineering. (American Institute of Chemical Engineers). New York, 1961- . Quarterly.

K-31 Journal of Applied Chemistry. (Scciety of Chemical Industry). London, 1951- . Monthly.

Beginning with vol. 4, 1954, the JAC contains a separately paged and separately bound section of Abstracts. ". . .Beginning in 1926 the abstracts of the two journals (Journal of the Chemical Society, London and the Journal of the Society of Chemical Industry, London) were combined in British Chemical Abstracts which in 1939 became British Chemical and Physiological Abstracts and finally, in 1945, British Abstracts, In 1953. . . the abstracting service stopped and what remained of British Abstracts appeared in the Journal of Applied Chemistry, covering the various technologies, and in Analytical Abstracts. . ." p.67 of Bottle, Use of the Chemical Literature.

General arrangement of the abstracts is as follows: chemical engineering, fuel and fuel products, industrial inorganic chemistry, industrial organic chemistry, fats, fibres, apparatus and unclassifies. Single issues have only author index. Cumulative author and subject indices are published annually. Includes British patents. --Bookmark

K-32 Plastics Abstracts. (Plastics Investigations). England , Perts, 1959- . Weekly.

A comprehensive abstracting service covering British Patent specifications and periodical articles dealing with the science, technology and application of plastics.

K-33 Proceedings. (Academy of Sciences of the U.S.S.R. Chemical Technology Section). New York, Consultants Bureau, Inc., 1956- . Six times a vear.

K-34 Theoretical Chemical Engineering Abstracts. (Technical Information Co.) England, 1964- . Bi-monthly.

K-35 Verfahrentechnische Berichte. (Chemical Engineering Abstracts). Germany, 1954- . Three to five times a month.

K-36 Chemical Economics Handbook. (Stanford Research Institute, Department of Business and Industrial Economics). Stanford, California, 1950- .

Seven looseleaf volumes to 1961.

Manual of current indicators in index volume.

K-37 Chemical Engineer's Handbook, 4th Edition. J. H. Perry, editor. New York, McGraw-Hill, 1963.

K-38 Chemical Industry Facts Book. (Manufacturing Chemists' Association). Washington, D. C., 1953- . Annual.

K-39 Chemical Reports. (United States Tariff Commission). Washington, D. C., various dates. Monthly and annually.

Composite source.

K-40 Chemical Statistical Directory No. 3. United States Department of Commerce, Business and Defense Servies Administration. Washington, D. C., 1964.

K-41 Chemical Statistics Handbook. (Manufacturing Chemists' Association). New York, 1940- . Annual.

K-42 Encyclopedia of Chemical Technology. Raymond E. Kirk and Donald E. Othmer, editors. New York, Interscience, 1947-1956.

K-43 Cumulative Index to ASCE Publications. American Society of Civil Engineers, New York, 1961.

This is a subject and author index to the Society's publications for the following periods: Proceedings 1950-59; Transactions 1935-59; and Civil Engineering 1930-59.

K-44 Hydraulics Journal. (American Society of Civil Engineers). Ann Arbor, Mich., 1956- . Bi-monthly.

Supercedes, in part, the American Society of Civil Engineers, Journal.

K-45 Irrigation and Draining Division, Journal. (American Society of Civil Engineers). Ann Arbor, Mich., 1956- . Quarterly.

Supercedes, in part, the American Society of Civil Engineers, Journal.

K-46 Proceedings. (Institution of Civil Engineers). London, 1963- . Annual.

K-47 Sanitary Engineering Journal. (American Society of Civil Engineers). Ann Arbor, Mich., 1956- . Bi-,onthly.

Supercedes, in part, the American Society of Civil Engineers, Journal.

K-48 Waterways and Harbors, Journal. (American Society of Civil Engineers). Ann Arbor, Mich., 1956- . Quarterly.

Supercedes, in part, the American Society of Civil Engineers, Journal.

K-49 Applied Mechanics Reviews. (American Society of Mechanical Engineers). Easton, Pa., 1948- . Monthly.

A critical Review of the world literature in applied mechanics and related engineering sciences.

AMR is an index covering professional and technical journals, report literature, books, symposia, engineering experiment station publications, conference proceedings, ets., in the areas of general and applied mechanics, mechanics of solids, mechanics of fluids and heat, as well as many related fields. Each issue begins with an article from one of the above fields followed by abstracts from the literature and an author index for that issue. Annual bound volumes have cumulated author and subject indices. See Vol. 15 (1962) for a list of publications scanned and abbreviations used. --Bookmark

K-50 Index to the Place of Publication of ASME Papers, 1950-1959. American Society of Mechanical Engineers. San Diego, California, Specialized Information Services, 1960

This index to the place of publication of papers and preprints of the American Society of Mechanical Engineers arose from the need to be able to give journal references for these papers. Only those ASME papers which have carried an identifying number and which have been published in one of the serials of the American Society of Mechanical Engineers are included in this index. Introduction.

Supplements have been issued through 1962. These will be issued regularly in the future. --Bookmark

K-51 Seventy-Seven Year Index: Technical Papers 1880-1956. American Society of Mechanical Engineers, New York, 1957.

This subject index includes papers published in the Transactions of Mechanical Engineering and the Journal of Applied Mechanics of the Society. It does not include news stories, editorials, and book reviews.

Metallurgical

Abstracts, Bibliographies, Indexes

K-52 Abstracts and Book Title Index Card Service (ABTICS). (Iron and Steel Institute). London, 1960- . Fortnightly.

An abstracting service on card format.

K-53 ASM Review of Metal Literature. (American Society for Metals). Metals Park, Ohio, 1944- . Monthly.

This is an annotated survey of articles, technical papers and reports appearing in engineering, scientific and industrial journals and books, here and abroad. -- Title Page. Annual bound volumes are arranged under the borad subjects: corrosion, heat treatment inspection and control, powder meallurgy, extraction and refining, foundry, etc., with internal indices for authors and subjects . A list of publications with their addresses is given in the back of each bound volume. --Bookmark

K-54 Guide to Metallurgical Information. Eleanor B. Gibson, editor. New York, Special Libraries Association, 1965.

SLA Bibliography No. 3.

K-55 Metal Finishing Abstracts. (Robert Draper, Ltd.) Middlesex, England, 1959- . Bi-monthly.

K-56 Metallurgical Abstracts. (Institute of Metals). London. 1930- . Monthly.

Published as part of the Journal of the Institute of Metals. From 1931-1933 these abstracts appeared as supplements to the Journal; today they appear monthly in the back of the Journal but with their own pagination, volume number and index.

Coverage is international for both serials and books in all aspects of metallurgy.

See also: "Metallurgical Abstracts", by J. S. Bristow, in Special Libraries 52:566-569. December, 1961.

K-57 Thesaurus of Metallurgical Terms. American Society for Metals. Metals Information Staff. Metals Park, Ohio, 1968.

Provides cross references in meaning for about 8,000 metallurgical terms.

K-58 U. S. S. R. Abstracts Journal of Metallurgy. (U.S.S.R. Metallurgy Society) New York, Permagon Press, 1957-58 . Monthly.

Now U.S.S.R. Abstracts of Metallurgy, 1958- . Monthly.

Special References

K-59 Guide to Foreign Sources of Metallurgical Literature. J. T. Milek. Pittsburgh, Pa., Rimbach Associates, 1951.

Nuclear

K-60 Bulletin. (International Atomic Energy Association). Vienna, Austria, 1959- . Quarterly.

Other publications of the IAEA include: List of Periodicals in the Field of Nuclear Energy (irregular from 1961); List of Bibliographies on Nuclear Energy (irregular from 1960) List of References on Nuclear Energy (semi-monthly from 1959); Research, Information, Organization in Atomic Energy; a World List of Institutions Concerned (irregular from 1959).

K-61 Euratom Information; (European Atomic Energy Commission). Brussels, 1963- . Monthly.

Includes abstracts and patent information. In Dutch, English, French, German, and Italian.

K-62 Nuclear Engineering Abstracts. (Silver End Documentary Publications, Ltd.). London, 1960-1965. Quarterly.

Includes patent and trade mark information. Summaries in French, German, and English.

K-63 Nuclear Science Abstracts. (United States Atomic Energy Commission). Oakridge, Tenn., 19480 . Semi-monthly.

Covers the international literature on nuclear science and technology in the fields of biology and medicine, chemistry, engineering, geology and mineralogy, mathematics, metallurgy, physics, etc. It is the only comprehensive abstracting and indexing service in this field, covering journals, books, government reports (internationally), society publications, etc. It is particularly useful for locating reports of government research. Internal indices to NSA are made for report numbers, subjects, and authors, both personal and corporate. These indices are cumulated semi-annually, annually, and every five years for all previous years.

This last cumulated index is made for report numbers only. See the Jan.-June, 1963 index volume for a list of the journals indexed and their abbreviations.

NSA supercedes Abstracts of Declassified Documents and Guide to Published Research on Atomic Energy. -- Bookmark

For reports falling outside the scope of the NSA, see Research and Development Abstracts of the USAEC (from 1962).

K-64 Zentralblatt fur Kernforschung and Kerntechnik. (Institute for Dokumentation de Deutschen Akademie der Wissenschaften zu Berlin). Berlin, 1958- . Monthly.

An abstracting journal, including bibliographies and book reviews.

K-65 Agricultural-Biological Vocabulary. United States Department of Agriculture, National Agriculture Library. Washington, D. C., 1967.

Divided into a categorized and an alphabetical list. A supplement with the same format was published in 1968.

K-66 Agricultural Commodities--Projections for 1975 and 1985. Food and Agricultural Organization of the United Nations. Rome, 1967.

Attempts to define the scale and nature of the food problem facing the world, and to assess long term prospects in world trade in major agricultural commodities. Two volumes.

SECTION L

AGRICULTURAL AND LAND RESOURCES

The information and documentation system for agriculture as developed by the United States Department of Agriculture and the Food and Agriculture Organization of the United Nations is quite extensive. The FAO characterizes itself as a "world intelligence service on production. prices and trade that covers almost every commodity used to feed. clothe and house people throughout the world." --Catalog. A similar information system, although more technical than economic. is provided for countries of the British Commonwealth by the bureaus and three institutes which comprise the Commonwealth Agricultural Bureaux. Their abstracting and indexing services cover world literature. Information on agriculture and finance for anv particular country or region may usually be found in the reports of the banking and credit institutions of the country concerned or of the appropriate regional organization (See Section Z.). Other sources of information are the reports of the Ford and Rockefeller Foundations (including the Agricultural Development Council) and colleges and universities and other institutions which have been funding and assisting agricultural programs in developing countries.

The present section concentrates on the physical and agronomic aspects of agriculture: information sources in agricultural economics are listed in Section R.

a note of warning: agricultural production data are collected in terms of cycles of activity; thus data will sometimes be historically or horizontally (as among different regions) inconsistent as to dates.

Composite Reference Sources

L-1 Agricultural History. (Agricultural Historical Society). Champaign, Ill., 1927- . Quarterly.

A journal of research on the history of American Agriculture.

L-2 Agricultural Index. (H. W. Wilson Co.). New York, 1919- . Monthly.

A subject index to a selected list of English language publications with coverage from 1916 and including professional and trade journals, all bulletins from U. S. state agricultural experiment stations, selected U.S.D.A. publications, some publications from state agricultural extension departments, recent books and occasional literature relative to agriculture. Cumulated biannually in bound volumes. A list of publications indexed is given in front of each issue. See each volume under conservation, forest conservation, game protection, reclamation of land, soil conservation, etc.

L-3 Agriculture Regions of the World. Rand McNally Co. Chicago, Field Enterprises Educational Corporation, 1964.

A colored map published as a part of the World Book Atlas.

L-4 Agricultural Research. (Indian Council of Agricultural Research). New Delhi, India, 1961- . Quarterly.

L-5 Agricultural Research. (United States Department of Agriculture, Economic Research Service). Washington, D. C., 1953- . Monthly.

Reports latest research findings to those who work directly with farmers, processors, marketing agencies, and the general public. Cumulative index appears approximately every three years.

L-6 Agricultural Science Review. (United States Department of Agriculture. Economic Research Service). Washington, D. C., 1963- . Quarterly.

L-7 Agricultural Statistics. (United States Department of Agriculture). Washington, D. C., 1936- . Annual.

The annual statistical compendium, covering virtually all phases of agriculture.

L-8 Bibliography of Agriculture. (United States Department of Agriculture, National Agricultural Library). Washington, D. C., 1942- . Monthly.

A index to the literature of agriculture and its allied sciences received in the National Library. It includes publications from any country provided they are in one of the languages of western Europe or Russian or have summaries or abstracts in one of these languages; it also indexes new periodicals, serials, state Agricultural Experiment Station and Extension Service publications, publications of the FAO. personnel and organizations. In addition to the literature directly related to agriculture, it includes publications on a variety of ancillary subjects such as entomology, food and human nutrition, meteorology, forestry, etc. The forestry section of this index was issued separately by the FAO as the Bibliography of Forestry and Forest Products 1948-1952.

Monthly issues have only an author index arranged under broad topics; the December issue includes a cumulative author and subject index for the year. Not annotated.

The Bibliography superceded Agricultural Library Notes (1926-1942); Agricultural Economics Literature (1927-1942); Current Literature in

L-9 Bibliography of Agriculture, cont.

Agricultural Engineering (1931-1942); Entomology Current Literature (1932-1942), which was itself a merging of Agronomy Current Literature (1926-1934) and Botany Current Literature (1919-1934). --Bookmark

L-10 Bibliography on Agricultural Extension. U. Thomas. Rome, Food and Agriculture Organization of the United Nations, 1964.

Compiled under the auspices of the Institut fur Landwirtschaft Beratung in Stuttgart, as a continuation of a similar bibliography done by that Institute in 1955. More than 100,000 publications consulted: arranged according to subject. No geographic or author index.

L-11 Bibliography on Extension Research. (United States Department of Agriculture, Agricultural Extension Service). Washington, D. C., 1944- . Quinquennial.

Appears as Extension Service Circular No. 530.

Former editions appeared in 1944 (No. 416) and 1954 (No. 489). Annotated. Contains references to research studies pertaining to the organizations, administration and methods of doing extension work. Covers masters and doctoral theses, professional and governmental monographs.

L-12 Catalog of FAO Publications. (Food and Agriculture Organization of the United Nations). Rome. 1963- . Biennial.

Descriptive list of projects and publications of or sponsored by the FAO: all catalogs are cumulative from 1945.

L-13 Census of Agriculture. (United States Department of Commerce. Bureau of the Census). Washington. D. C., 1959- . Quinquennial.

1964 Census to report on horticulture and irrigation.

L-14 Dictionary of Agricultural and Allied Terminology. J. N. Wineburne. East Lansing, Michigan State University, 1962.

Contains terms used in agricutral chemistry, animal husbandry, bee-keepping. dairy, forestry, veterinary medicine, and other agricuture-related fields.

L-15 Experiment Station Record. (United States Department of Agriculture). Washington, D. C., 1889-1946. Monthly, ceased.

ESR started with the purpose of creating a current record of the results of work from the Agricultural Experiment Stations in the United States and of USDA publications; coverage was later extended to include work from the Canadian experiment stations and abstracts and reports on European investigations.

See also: Abbreviations Employed in Experiment Station Record. USDA Bulletin 1303.

L-16 FAO Agricultural Development Papers. Food and Agriculture Organization of the United Nations. Rome. 1949.

Monograph series dealing with social and scientific problems of agricultural development.

L-17 FAO Agricultural Studies. Food and Agriculture Organization of the United Nations. Rome, 1948.

Technical papers, conference proceedings, research results, situation reports, handbooks, etc.

L-18 Handbook of Tropical and Sub-Tropical Horticulture. Ernest Mortenson and Ervin T. Bullard. Washington, D. C., United States Department of State; Agency for International Development, 1968.

Describes all major tropical and sub-tropical vegetable and nut crops and the nutritional value of each one. Also gives a general outline for disease and weed control in tropical and sub-tropical crops.

L-19 Index to the Publications of the U. S. Department of Agriculture, 1901-1940. United States Department of Agriculture, Washington, D. C., various dates.

An author and subject index to non-periodical publications of the Department, including the Journal of Agricultural Research. Preceded by USDA Library Bulletin No. 9, "List of Publications of the U. S. Department of Agriculture, from 1841 to June 30, 1895, inclusive." --Bookmark

L-20 Journal of the Science of Food and Agriculture. (Society of Chemical Industry). England, 1950- . Monthly.

Beginning with the January, 1954, issue JSFA includes a special section of Abstracts. These were formerly issued under the title British Abstracts B III.

This abstract section is best used as a current awareness device rather than for retrospective searching and is arranged under the headings: Agriculture and Horticulture; Food (including appropriate microbiological processes and essential oils); Sanitation (including water, sewage and atmospheric pollution); Apparatus and Unclassified. Cumulated author and subject indices are published semi-annually. Note that the index to the abstracts has been separately from the index of the journal itself. Covers selected British Patents as well as items from Dissertation Abstracts.

L-21 Literature of Agricultural Research. J. Richard Blanchard and Harold Ostvold. Berkeley, University of California Press, 1958.

Includes basic current and historical reference materials, extensively annotated, and a discussion of the characteristics of the literature of each subfield. Arranged under headings: General, Plant Sciences, Animal Sciences, Physical Sciences. Food and Nutrition, Social Sciences.

L-22 Production Yearbook. (Food and Agriculture Organization of the United Nations). Rome. 1958- . Annual

From 1947-1957 this Yearbook and its companion volume, Trade Yearbook, were published under the title Yearbook of Food and Agricultural Statistics.

Includes statistical tables on production of crops, livestock and livestock products, land use, population and food supply, indices of agricultural production, prices in different markets for almost 50 commodities, means of production (use of fertilizers, tractors, etc.), and wage and freight rates. The 1964 edition also covers the period 1950-1963.

L-23 Review of the Agricultural Situation in Europe. (United Nations, Economic Commission for Europe). Geneva, 1921- . Annual.

Tabulates production of all European agricultural commodities for the preceding year. Also lists imports and exports.

L-24 State of Food and Agriculture. (Food and Agriculture Organization of the United Nations). Rome. 1947- . Annual.

The authoritative annual review of developments in the world food and agricultural situation, with a year by year report on the outlook for the future. Includes detailed studies on special features. One of the most important FAO publications. --Catalog

L-25 Tropical Abstracts. (Advise and Documentation Bureau, Department of Agricultural Research. Royal Tropical Institute). Amsterdam, Netherlands, 1946- . Monthly.

Compiled from world literature on tropical and subtropical agriculture.

L-26 Yearbook of Agriculture. (United States Department of Agriculture). Washington, D. C., 1894- . Annual.

Each issue is devoted to one theme (feed, crops, water, food, etc.) as an anthology of articles by domestic and international experts.

Agronomy and Related Subjects

Abstracts, Bibliographies, Indexes

L-27 Abstracts of Recent Published Material on Soil and Water Conservation. (United States Department of Agriculture). Washington, D. C., 1949- . Irregular.

Arranged under broad headings: watershed management, watershed engineering, basic soil problems, erosion control, soil and plant management, wildlife, etc. Lacks comprehensive index.

L-28 Agricultural and Horticultural Engineering Abstracts. (British Society for Research in Agricultural Science, National Institute of Agricultural Engineering). London, 1950- . Quarterly.

Includes bibliographies and book reviews. Index quarterly and annually.

L-29 Agricultural Engineering Index, 1907-1960. Carl W. Hall, St. Joseph, Michigan, American Society of Agricultural Engineers, 1961.

This is a single volune subject index to the following publications for the years indicated: Agricultural Engineering (1920-60), Canadian Agricultural Engineer (1959-60), Journal of Agricultural Engineering Research (1956-60), Landtechnische Forschung (1951-60), Institution of Agricultural Engineers (1949-60), Journal, Proceedings and Yearbook, plus ASAE Papers (1956-60), Transactions (1958-1960) and Yearbooks (1954-60). A list of agricultural engineering books begins on p. 127. This list is arranged under the headings: general, electricity, machinery and mechanization, processing, shop and mechanics, soil and water, and structures. --Bookmark

L-30 Agronomie Tropicale. (Institute de Recherches Agronomiques Tropicales et des Cultures Vivrières). Paris, 1946- . Monthly.

Summaries in English and Spanish. Cumulative Index every ten years.

L-31 An Annotated Bibliography of Rice Soils and Fertilizers. G. V. Jacks and K. Milne. Rome, Food and Agriculture Organization of the United Nations. 1954.

Arranged into three main sections: 1) soils, 2) cultural operations (including irrigation, 3) fertilizers. Includes references from 1929.

L-32 An Annual Review of World Production and Consumption of Fertilizers. (Food and Agriculture Organization of the United Nations). Rome, 1953- . Annual.

Lists the imports, exports, and consumption of phosphates, potash, and n nitrogenous fertilizer by country, and the prices for each type, for the preceding year of July 1, - June 30.

L-33 Basic Statistics of the National Inventory of Soil and Water Conservation Needs. United States Department of Agriculture, Conservation Needs Inventory Committee. Washington, D. C., 1962.

Statistical Bulletin No. 317.

L-34 Bibliography of Agricultural Meteorology. Jen Yu Wang and Gerald L. Barger. Madison, Wisconsin. University of Wisconsin Press, 1962.

International in scope. Not annotated. Covers the subjects of radiation, temperature, moisture, related factors (wind, smog, freezing, etc.), micro-climate, observation, instrumentation, plant pests, and their relatives, livestock and domestic fowl, phenology, environmental control and agrometeorological forecasting. --Bookmark

L-35 Bibliography of Soil Science, Fertilizers and General Agronomy. (Commonwealth Bureau of Soils, Commonwealth Agricultural Bureaux). London, 1931- . Triennial.

This is a classified bibliography of the world's literature arranged according to a modification of the Universal Decimal Classification scheme. A breakdown of this scheme has been given in the front of each volume. Also includes a list of abbreviations of journals and periodicals an author index and a subject index with each volume. --Bookmark

L-36 Landwirtschaftliches Zentralblatt: Abteilung I: Land Technik. (Deutsche Akademie der Landwirtschaftswissenschaften zu Berlin). Berlin, Akademi-Verlag, 1955- . Nine times annually.

An agricultural abstracting journal.

L-37 Soil Conservation Bibliography. (U.S. Soil Conservation Service). Washington, D. C., 1940- . Irregular.

Issued by U.S. Agriculture Department. A series of monographs on topics relating to soil conservation.

L-38 Soil Survey Reports. (United States Department of Agriculture, Soil Conservation Service). Washington, D. C., various dates. Irregular.

Series intended eventually to cover all parts of the country and give detailed information about the types of soils and their condition in relation to erosion.

Composite source.

L-39 Soils and Fertilizers. (Commonwealth Bureau of Soils, Commonwealth Agricultural Bureaux). London, 1932- . Bi-monthly.

Abstracts covering world literature in the fields of pedology, technique and analysis, soil physics, soil classification, fertility, soil biology. fertilizers, plant diseases, grassland, cereals, fruit, forestry, etc. Author and subject index annually. Indexed in the Bibliography of Soil Science, Fertilizers and General Agronomy.

Statistical and Special References

L-40 Agricultural Conservation Programs: Summary by States. (United States Department of Agriculture, Agricultural Stabilization and Conservation Service). Washington, D. C., 1951- . Annual.

Tabulates activities of the Agricultural Conservation Programs, listing emergency measures, payments and participating farms.

L-41 Aircraft in Agriculture--1962. United States Federal Aviation Agency. Washington, D. C., 1962.

L-42 Drainage of Agricultural Lands. (United States Department of Commerce, Bureau of the Census). Washington, D. C., 1930- . Decennial.

L-43 Eighteen States: Location of Irrigated Land, 1959. United States Department of Commerce, Bureau of the Census. Washington, D. C., 1960.

Based on 1959 Census of Agriculture. Separate state maps are also available.

L-44 FAO Atomic Energy Series. (Food and Agriculture Organizatior of the United Nations). Rome, 1959- . Irregular.

Monograph series on radioactive materials in agriculture.

Composite source.

L-45 Handbook of Agricultural Charts, 1965. United States Department of Agriculture. Washington, D. C., 1966.

Shows the general agricultural situation and trends in specific commodities through 1965.

L-46 International Directory of Agricultural Engineering Institutions. H. J. Hopfen. Rome. Food and Agriculture Organization of the United Nations. 1957.

Lists departments of universities and technical institutions, including faculty activities, and publications of the institutions. Contains a bibliography and name index.

L-47 Irrigated Land, World Map. Based on study by Richard M. Highsmith, Jr., "Irrigated Lands of the World," in Geographical Review, Vol. LV, No. 3, July, 1965.

L-48 Irrigation of Agricultural Lands. (United States Department of Commerce. Bureau of the Census). Washington, D. C., - . Decennial.

L-49 Multilingual Vocabulary of Soil Science. G. V. Jacks, R. Tafernier, D. H. Boaleer. Food and Agriculture Organization of the United Nations. Rome, 1960.

English, French, Spanish, German, Portuguese, Italian, Dutch, Swedish, Russian.

L-50 Weekly Weather and Crop Bulletin. (United States Department of Commerce, Weather Bureau). Washington, D. C.. 1942- . Weekly.

National summary. A synopsis of weather conditions and their effects on crops and farming operations in the United States: also shows snow and ice conditions during the winter season.

L-51 World Crop Harvest Calendar. Food and Agriculture Organization of the United Nations, Statistical Division. Rome. 1962.

It is just that. For any country the major crops, the harvest period and the bulk of the harvest are listed.

L-52 World Crop Statistics, 1948-1964. Food and Agriculture Organization of the United Nations, Rome, 1966.

Contains long-term series from 1948-1964 on areas, production, and yield for all the crops data which are published annually in the FAO's Production Yearbook. Tables are given for eighty commodities, listed by countries; also graphs trends in production over the period.

L-53 A World Geography of Irrigation. Leonard M. Canter. London, Oliver and Boyd, 1967.

Includes two main sections: one which outlines the history of irrigation and describes traditional and modern methods and their social and economic problems. The second section describes the present condition of irrigated regions of the world on a geographic basis.

Animal and Veterinary Sciences

Abstracts, Indexes, Guides to Research

L-54 Animal Breeding Abstracts. (Commonwealth Bureau of Animal Breeding and Genetics, Commonwealth Agricultural Bureaux). London, 1933- . Quarterly.

Contains abstracts from world literature under the following headings: general livestock, horse, cattle, sheep, pig, fur bearers, laboratory mammals, poultry, general genetics, etc. Single issues have a review article, a list of books received, notices of meetings, news and notes from the field, and author index. Cumulated author, subject, poultry, livestock, and geographical indices are published annually. A guide to the periodicals indexed was published in 1962. --Bookmark

L-55 Animal Health Yearbook. (Food and Agriculture Organization of the United Nations). Rome, 1957- . Annual.

Annual world livestock disease report, with tables showing name of disease and species of animal in which disease is reported. Includes general notes, maps, special articles.

L-56 Dairy Science Abstracts. (Commonwealth Bureau of Dairy Science and Technology, Commonwealth Agricultural Bureaux). London, 1939- . Monthly.

An index to material from all branches of dairy science and technology including: husbandry, technology, engineering, economics, physiology, microbiology, etc. International coverage of journals, books and reports in all languages. DSA also contains review articles surveying work done in particular fields of dairy science and technology. Cumulated author and subject indices are published annually. A list of periodicals indexed and their abbreviations is bound with volume 16, 1954. --Bookmark

L-57 Helminthological Abstracts. (Commonwealth Bureau of Helminthology, Commonwealth Agricultural Bureaux). London, 1932- . Quarterly.

This is a review if the world literature on helminths and their vectors especially in relation to veterinary, medical and plant pathology, soil science, fisheries, fresh-water and marine zoology, taxonomy, and geographical distribution. Cumulated author and subject indices are published annyally. Preceded by the Bibliography of Helminthology published by the Imperial Bureau of Agricultural Parasitology, 1930-1933. --Bookmark

L-58 Index Verterinarius. (Commonwealth Bureau of Animal Health. Commonwealth Agricultural Bureaux). London. 1933- . Quarterly.

Gives bibliographic information only, no abstracts. Selection of titles for Ind. Vet. is determined by their discussion of the incidence or prevention of animal disease. Each issue consists of a single alphabetical index of names of authors and subjects. References dealing with books and with reports of departments and institutions are placed in separate sections at the end of the index. Ind. Vet. includes everything abstracted in the Veterinary Bulletin plus some material not in VB. --Bookmark

L-59 Landwirtschaftliches Zentralblatt: Abteilung III: Tierzucht, Tierernahrung. Fisherei. (Deutsche Akademie der Landwirtschaftswissenschaften zu Berlin). Berlin, 1955- . Monthly.

An abstracting journal.

L-60 Review of Applied Entomology. (Commonwealth Institute of Entomology, Comonwealth Agricultural Bureaux). London. 1893- . Monthly.

Consists of abstracts or reviews of current literature on applied entomology throughout the world. Series A: Agricultural. Series B: Medical and Veterinary.

L-61 The Veterinary Bulletin. (Commonwealth Bureau of Animal Health. Commonwealth Agricultural Bureaux). 1931- . Monthly.

Includes bibliographic information. brief abstracts and occasional review articles; does not include "popular" literature.

Special References

L-62 Advances in Veterinary Science. (Academic Press, Inc.). New York, 1953- . Irregular.

L-63 British Veterinary Codex. 1953. Pharmaceutical Society of Great Britain. London, Pharmaceutical Press, 1953.

Supplement, 1959

L-64 Consumption of Feed by Livestock. 1909-1956. Ralph D. Jennings. Washington, D. C., United States Department of Agriculture. November, 1958.

Production Research Report No. 71.

L-65 Livestock Health Encyclopedia, 2nd Edition. Rudolph Seiden. New York. Springer, 1961.

L-66 Livestock in Latin America: Status, Problems, Prospects. United Nations, Economic Commission for Latin America, New York, 1962.

L-67 The Merck Veterinary Manual: A Handbook of Diagnosis and Therapy for the Veterinarian, 2nd Edition. Merck & Co., Inc., Rahway, New Jersey, 1961.

L-68 World Catalog of Genetic Stocks. (Food and Agriculture Organization of the United Nations). Washington, D.C., 1950- .

Issued by the Plant Industry Branch of its Agricultural Division. Published in three sections: Barley, Rice, Wheat.

Fish and Fisheries

Abstracts, Bibliographies, Indexes

L-69 A Bibliography of Fishes. Bashford Dean. New York, American Museum of Natural History, 1916-1923.

A survey of the ichythological literature stopping roughly with 1914 although references have been included which were published after this date. Covers the literature only so far as families and genera with occasional references to species. Volumes I and II include: Authors' List of Titles, Anonymous Publications, and Pre-Linnaean Works. Volume III includes: Indices, General Bibliographies, Periodicals related to fishes, early works, voyages and expeditions, addenda and errata of Volumes I and II. --Bookmark

L-70 Bibliography of Theses on Fishery Biology. Robert M. Jenkins, editor. Washington, D. C., The Sport Fishing Institute, 1959.

Compilation of graduate theses, master's and doctoral, on fishery biology and related subjects. Someduplication, but for additional material the reader should also see U. S. Fish and Wildlife Service Special Scientific Report: Fisheries Nos. 31, 87, and 272. --Bookmark

L-71 Current Bibliography for Aquatic Sciences and Fisheries. (Food and Agriculture Organization of the United Nations, Fisheries Division). Rome, 1958- . Monthly.

An index to studies of living aquatic resources and their environments aa as well as the methods of research applicable in this field. Also covers references to fisheries legislation plus those relating to economic or technological as well as biological fields are included for marine and fresh waters beginning in 1957. There are five internal indices to the Bibliography: Author, Geographic, Taxonomic, Subject, and Citation.

See also: Current Bibliography for Aquatic Sciences and Fisheries: List of Periodicals Searched Regularly. In FAO Fisheries Biology Technical Paper No. 9, 1960. --Bookmark

L-72 Dingell-Johnson Quarterly. (United States Department of the Interior, Fish and Wildlife Service). Washington, D. C., 1953- . Irregular.

A review of the accomplishments of the Federal Aid in Fish Restoration program. Achievements of general interest are presented from investigations, development and land and water acquisition projects. --Title Page. Compiled from reports prepared by the states and territories.

L-73 Index and List of Titles, Fisheries Research Board of Canada and Associated Publications, 1900-1964. Neal M. Carter. Ottawa, Canada, Fisheries Research Board of Canada, 1968.

Up-dates the Index published in 1957, and includes a subject-author index to the list of titles, which is divided according to type of publication (articles, progress report, bulletin, circular, etc.).

L-74 Index of Fishery Technological Publications, 1918-1955. United States Department of the Interior, Fish and Wildlife Service. Washington, D. C., 1961.

This index covers Government publications, trade and scientific journals printed during 1918-1955 in the field of fishery technology. Additional bibliographies are: Fishery Publication Index, 1920-1954, Wildlife Service Circular 36; Document 899, Appendix V to the Report of the United States Commission of Fisheries for Fiscal Year 1920, An Analytical Subject Bibliography of the Publications of the Bureau of Fisheries 1871-1920: and Special Scientific Report--Fisheries No. 284, Publications of the United States Bureau of Fisheries 1871- 1940. -- Bookmark

Circular 96.

L-75 Sport Fishery Abstracts. (United States Department of the Interior, Fish and Wildlife Service). Washington, D. C., 1955- . Quarterly.

SFA is intended to furnish fishery biologists with abstracts of the current literature in sport fishery research and management. Abstracts of papers on limnology, ecology, natural history, and other fields of specialization will be included when the subject has application to the conservation of sport fish and the restoration of sport fishing. Each number contains separate author and subject indices, with the final number of each volume containing cumulative indexes. The last number of each volume contains a list of publications screened for appropriate material. --Title Page. --Bookmark

L-76 Transaction of the American Fisheries Society. (The American Fisheries Society). Lawrence, Kansas, 1872- . Quarterly.

Publishes articles dealing with all aspects of fish and fisheries; includes book reviews and a yearly index.

Special References

L-77 Handbook for World Fisheries Abstracts. Joel Mogens, editor. Rome, Food and Agriculture Organization of the United Nations, 1950.

Contains detailed descriptions of alternative systems for filing the Abstracts.

L-78 A List of Common and Scientific Names of Fishes from the U. S. and Canada, 2nd edition. American Fisheries Society, Ann Arbor, Michigan, 1960.

Special Publication No. 2.

L-79 Multilingual Vocabulary and Notation for Fisheries Dynamics. S. J. Holt. Rome, Food and Agriculture Organization of the United Nations, 1960/

L-80 World Directory of Hydrobiological and Fisheries Institutions. Robert W. Hiatt, editor. American Institute of Biological Sciences. Honolulu, University of Hawaii Press, 1954.

Forestry

Abstracts, Bibliographies, Indexes

L-81 Basic Library List for Forestry. 3rd Edition. Ernest F. Hemmings. Commonwealth Forestry Institute. Oxford, Holywell Press, 1963.

L-82 Bibliographie des Forst und Holzwirtschaftlichen Schrifttums. (Bundesforschungesanstalt fur Forst und Holzwirtschafr). Reinbek bei Hamburg. 1956- . Quarterly.

A mimeographed index to the world's forestry literature arranged according to the Oxford system of decimal classification for forestry as follows: general forestry, biology, silviculture, logging, and forest engineering, forest protection, mensuration, forest management, marketing of forest products, social economics of forestry, etc. Citations have detailed bibliographic information including language(s) of the original but are printed on cheap paper. Individual issues have only author index. Cumulated author and subject indices are published annually. In the front of each issue is given a list of abbreviations and their English equivalents. This index duplicates to a large extent material already indexed in Forestry Abstracts. Before 1956, BFUHS was called Bibliographie des Auslandischen Forst-und Holzwirtschaftlichen Neue Folge. --Bookmark

L-83 Bibliography on Forest Genetics and Forest Tree Improvement. 1958-59. Jonathen William Wright and Paul O. Rudolph. Washington, D. C., United States Department of Agriculture, 1962.

Misc Publ. No. 906.

L-84 Bulletin: Library Note. (Institute of Paper Chemistry). Appleton, Wisconsin, 1930- . Monthly.

Indexed annually and decenially.

L-85 Commonwealth Forestry Review. (Commonwealth Forestry Association). London, 1921- . Quarterly.

Formerly Empire Forestry Review.

Includes abstracts, bibliographies, book reviews, advertising.

L-86 Dictionary Catalog of the Yale Forestry Library. G. K. Hall. Boston, Massachussetts, Yale University Press, 1962.

The Yale Forestry Library is one of the most extensive forestry libraries in the United States. There are now over 90,000 volumes and approximately 250,000 cards in its catalog. These volumes consist of facsimilies of the cards from this catalog. One of its most valuable features is the inclusion of more than 38,000 cards for articles from the Journal of Forestry, Forestry Quarterly, and the Proceedings of the Society of American Foresters from 1900-1940. This catalog also indexes all of the leading forestry magazines from 1920-1940. --Bookmark

L-87 FAO Forestry Development Papers. (Food and Agriculture Organization of the United Nations). Rome, 1954- . Irregular.

A series of technical and scientific monographs. See also the FAO Forestry and Forest Product Studies (from 1950) for papers dealing with broader problems.

L-88 Ford Forestry Center Technical Bulletin. Ford Forestry Center. Michigan College of Mining and Technology. L'Anse. Michigan, 1959- . Irregular.

This Center serves as a focal point for research, as an instruction facility for forestry students and others, and as a demonstration area where long-term results of controlled forestry practices may be observed and special projects conducted.

L-89 Forest Cooperatives: A Bibliography. Gilbert P. Dempsey. Washington, D. C., United States Department of the Interior Library, 1967.

Contains sections dealing with the history and description, evealuation and small woodland marketing research in forest-based cooperatives, and a section on general economics of cooperatives.

L-90 Forest Fire Control Abstracts. (Canada. Department of Forestry). Ottawa, Canada, 1956- . Semi-annual

Test in English and French. Formerly: Forest Fire Protection Abstracts.

L-91 Forestry Abstracts. (Commonwealth Forestry Bureau, Commonwealth Agricultural Bureaux). London, 1939- . Quarterly.

An index to the current world literature on forestry including: entomology, soils, harvesting, breeding and utilization of all forest products. Beginning with Volume 13 each issue is arranged according to the Oxford system of decimal classification. Individual issues begin with a review article on some aspect of forestry and conclude with an author index. Subject, species geographical and cumulated author indices are issued annually. A list of the abbreviations used is given in the FAO Forestry and Forest Products Studies No. 7, 1953, Forestry Abstracts Coverage List, and in the Guide to the Use of Forestry Abstracts, revised edition, 1958.

See also: "Literature of Forestry" by F. C. Robinson, in Forestry Abstracts 16:157-60. 1955. --Bookmark

L-92 Forstliche Umschau: Referate Uber das Forst-Und Holzwirtschaftliche Schrifttum. (Paul Parey, Verlag). Hamburg, Germany, 1958- . Quarterly.

Arrangement is by the Oxford system of decimal classification for forestry under the headings: silviculture, forest protection, mensuration, management, wood technology, forest economics, marketing, products, etc. Heavily weighted in favor of German and European forestry publications. Cumulated author indices and contents listings are published annually.

This publication superceded Forstliche Rundschau. Berichte uber die Gesamte Forstliche Literature des In-und Auslandes (J. Neumann Neudamm, 1928-1945). a compilation of abstracts from world literature on all phases of forestry arranged by subject and country. --Bookmark

L-93 Selected Bibliography on Water and Soil Conservation with Special Reference to Forestry. Food and Agriculture Organization of the United Nations, Forestry and Forest Products Division. Rome, 1961.

L-94 Selected References on Forests and Related Natural Resources. United States Department of Agriculture, Forest Service. Washington, D. C., 1963.

A partially annotated list of references and readings.

L-95 Tree Physiology Bibliography. Theodore T. Koslowski. Washington, D. C., United States Department of Agriculture, 1958.

This bibliography is a reprint of one issued in May, 1956, by the University of Massachusetts. It developed from a personal card file used by the author in teaching plant physiology to forestry students. Subjects covered include: carbohydrate metabolism, dormancy, growth of stems, growth of roots, lipids, mineral nutrition, nitrogen metabolism, photosynthesis, respiration, translocation and water relations. --Bookmark

L-96 Unasylva. (Food and Agriculture Organization of the United Nations). Rome, 1947-49, bimonthly, 1949- . Quarterly.

Review journal of forestry and forest products. Contains articles on world conditions and developments, world, regional, and technical conferences; commodity reports on forest products entering international trade; news items and reviews of current technical literature.

Statistical and Special References

L-97 An Encyclopedia of World Timbers. F. H. Titmuss. New York, Philosophical Library, 1959.

L-98 Forest Fire Statistics. (United States Department of Agriculture, Forest Service). Washington, D. C., 1963- . Annual

L-99 Forest Seed Directory. (Food and Agriculture Organization of the United Nations). Rome, 1954- . Annual.

L-100 Forest Service Handbook. United States Department of Agriculture, Forest Service. Washington, D. C., latest edition, 1958.

Twenty-four volumes plus index, available primarily to Forest Service Stations.

L-101 Forestry Handbook. R. D. Forbes. Society of American Foresters. New York, Ronald Press. 1955.

This reference has become a bible of foresters. "Designed for the use of all who have a professional or commercial interest in the forest lands and crops of North America." Preface. Discusses working methods and techniques, formulas, tables, converting factors, and related data.

L-102 Forestry Terminology, 3rd Edition. Ralph C. Hawley, editor. Washington, D. C., Society of American Foresters. 1958.

L-103 List of Publications on Wood Finishing Subjects. United States Department of the Interior, Office of the Forest Service. Forest Products Laboratory. Washington, D. C., 1967.

Includes publications dealing with weathering characteristics of wood, paint, varnish, exposure testing, exterior and interior finishes.

L-104 List of Publications on Wood Preservation Subjects. United States Department of the Interior, Office of the Forest Service, Forest Products Laboratory. Washington, D. C., 1967.

Includes publications dealing with preservative materials, methods of application, durability and service records of treated and untreated wood.

L-105 Lumberman and Timberman's Handbook and Directory of the Forest Industries. Miller Freeman Publications. Seattle, Washington, 1935- . Annual.

L-106 Manual of Trees of North America, 2nd Edition. C. S. Sargent. Gloucester, Massachusetts, P. Smith, 1962.

L-107 National Forest Areas. (United States Department of Agriculture, Forest Service). Washington, D. C., 1905- . Annual.

L-108 National Forest Reservation Commission Report. (United States National Forest Reservation Commission. Senate Document Series). Washington, D. C., 1911- . Annual.

L-109 The Oxford System of Decimal Classification for Forestry. Commonwealth Forestry Bureau, Commonwealth Agricultural Bureaux, Oxford, England. 1954.

L-110 Timber Trends in the United States. United States Department of Agriculture, Forest Service. Washingon, D. C., 1965.

"Latest in the series of periodic appraisals of the timber situation and outlook in the United States made by the Forest Service, begun in 1952 as the Timber Resource Review. These periodic reports on the nationwide situation and outlook are conducted in cooperation with various state agencies and private cooperators." --Preface

L-111 Training Handbook: Basic Techniques in Forest Photo Interpretation. Karl E. Moessner. United States Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. Washington, D. C.,February, 1960.

Prepared primarily for instructors. Includes glossary, solved problems.

L-112 Wood Handbook. Ronald F. Luxford, compiler. United States Department of Agriculture, Forest Service, Forest Products Laboratory. Washington, D. C., 1955.

Agriculture Handbook No. 72.

L-113 Wood Preservation Statistics. (United States Department of Agriculture, Forest Service, and American Wood-Preservers Association). Washington, D. C., - . Annual.

L-114 World Forest Inventory: 1958. Food and Agriculture Organization of the United Nations. Rome, 1958.

Inventory conducted every five years, and published two to three years later. Includes graphs, charts and maps, and introductory chapter, and tables.

L-115 A World Geography of Forest Resources. Stephen Haden-Guest, et. al., for the American Geographical Society. New York, Ronald Press, 1956.

An anthology of writing by international experts, with discussion on general principles, practices and problems of managing forest resources and a chapter on each of the major forest resource countries. Includes conversion factors, botanical and general indices.

Plants and Crops

Abstracts, Bibliographies, Indexes

L-116 Bibliographie Der Pfanzenschutz-Literatur. (Biologische Bundesanstalt Für Land-und Forstwirtschaft). Berlin-Dahlem, 1921- . Irregular.

The Bibliography of Plant Protection indexes the phytopathological literature from 1914 to the present. It is divided into two sections: diseases and causes, diseases and host plants. These sections are further divided into Forest Trees, Timbers, Parasites of Wood and Wood Preservation, Virus, Animal Parasites, Vegetal Parasites, etc. A list of the serials indexed and their abbreviations was published as a separate in 1958 by the Biologische Bundesanstalt.

This index continues the Jahresbericht uber das Bebiet der Pfanzen-krankheiten, which indexed the literature for 1898-1913 and was published in 16 volumes from 1899-1917. --Bookmark

L-117 Dictionary Catalog of the Library of the Massachusetts Horticultural Society. Massachusetts Horticultural Society. Boston, G. K. Hall, 1962.

The Massachusetts Horticultural Society was founded in 1829 by a small group of Boston businessmen. The first catalog of the Society's Library, printed in 1831, listed fewer than two hundred volumes. The catalog of 1962 includes more than 31,000, making this the largest and most comprehensive library in its field. This Library covers the centuries from the earliest primative herbals to reports of current research. The collection of American horticulture literature is especially rich, but all parts of the world and all climates are represented. For many years the policy has been to try to obtain every American gardening publication and the best of the foreign. There are approximately 12,600 volumes in the serial collection, with a broad range of countries and periods. The reports of American state horticulture societies and special plant societies, government bulletins and the records of the American garden club movement are usually complete. -- Preface.

L-118 FAO Plant Protection Bulletin. (Food and Agriculture Organization of the United Nations). Rome, 1952- . Monthly.

A publication of the World Reporting service on plant diseases and pests.

L-119 Field Crop Abstracts. (Commonwealth Bureau of Pastures and Field Crops, Commonwealth Agricultural Bureaux). London, 1948- . Quarterly.

FCA attempts to avstract all published scientific results on annual field crops, grasses, pastures, rangelands and fodder crops from over 1000 periodicals and reports from all parts of the world. The Commonwealth Bureau of Pastures and Field Crops (one of 10 Bureaux and 3 Institutes which form the Commonwealth Agricultural Bureaux) can provide an extended abstract should more information on a paper or part of a paper be desired. Single issues normally include a review article, an author index and are arranged under the following subjects: Cereals, legumes, root crops, fibre crops, oil crops, crop botany, weeds and weed control, etc. A list of periodicals and reports examined has been provided in the February 1964 issue. --Bookmark

L-120 Herbage Abstracts: a quarterly abstracting journal on grassland
L-121 husbandry and fodder crop production. (Commonwealth Bureau of Pastures and Field Crops, Commonwealth Agricultural Bureaux). Aberstwyth, Great Britain, 1931- . Quarterly.

An index to the world literature on temperature and tropical fruits, vegetables, ornamentals and plantation crops. Under horticultural crops are included all whose products normally appear as fruits, vegetables, nuts, or flowers, while all tropical and sub-tropical perennials, other than forest trees, such as tea, rubber, oil palm, sugar cane, etc., are classed as plantation crops. Tobacco, drug, insecticidal, spice and certain other plants difficult to classify are also dealt with. --Title Page.

HA abstracts over 1000 periodicals and reports from all parts of the world. A list of these appears in the June, 1963 number. Individual issues contain a review article and roughly 500 abstracts arranged under the following subjects: management of grassland and fodder crops, varieties, strains and plant introductions, fodder conservation, seeds, chemical composition and feeding value, weeds, plant protection, soil and water conservation, irrigation, agricultural meteorology, etc.

Single issues have only author index. Cumulated author and subject indices are published annually. --Bookmark

L-122
L-123 Index of Fungi, A List of Names of New Genera, Species and Varieties of Fungi, New Combinations and New Names, Compiled from World Literature. (Commonwealth Mycological Institute, Commonwealth Agricultural Bureaux). Kew, Great Britain, 1948- . Semi-annual.

This is a systematic index giving the place of publication for all new genera, species and varieties of fungi as well as new combinations and new names. From 1940 through 1947 these lists were issued as supplements 1-15 to the Review of Applied Mycology. For the period 1920 through 1935 similar lists were prepared by F. Petrak and published under the title "Verzeichnis der Neuen Arten, Varietaten, Formen, Namen, und Wichtigsten Synonyme der Pilze," in Just's Botanisches Jagresbericht. This Verzeichnis was later reprinted and published with the original format under the title Index of Fungi. To this, Dr. Petrak later added a list he prepared as a index to the period 1936-1939, therby creating a more or less complete index of new fungus names from 1920 to date. For a listing of new species published prior to 1920, the reader should consult Saccardo's Sylloge Fungorum.

All names are arranged alphabetically under the genera with a host and generic name index.

A cumulative index of generic names, specific epithets, host genera and other substrata in Petrak's Lists (1920-1939) is available. --Bookmark

L-124 Induction de mutations chez les plantes superieures d'interet agricole par les rayonnements beta, gamma, les neutrons et les protons. Etude Bibliographique. Saclay, 1962.

L-125 Landwirtschaftliches Zentralblatt. Abeillung II: Pflanzliche Produktion. (Deutsche Akademie der Landwirtschaftswissenschaften zu Berlin). Berlin, 1955- . Monthly.

An abstracting journal.

L-126 Plant Breeding Abstracts. (Commonwealth Bureau of Plant Breeding and Genetics, Commonwealth Agricultural Bureaux). Farnham Royal, Great Britain, 1930- . Quarterly.

Abstracts taken from world literature (journals, books, reports, symposia, proceedings, congresses, meetings, etc.) referring to the plant breeding or genetics of crop plants. Subjects covered range from vegetables, forest tress, fruits and nuts, wheat, cytology, etc. Author index only for each issue. Cumulated author and subject indices published annually. --Bookmark

L-127 Review of Applied Mycology. (Commonwealth Mycological Institute, Commonwealth Agricultural Bureaux). Kew, Great Britain, 1922- . Monthly.

A compilation of abstracts from the more important world literature on diseases of plants caused by fungi, bacteria, virus, and non-pathogenic factors and covering such subjects as vegetables, fungi, bacteria, fungicides, viruses, cereals, fruit, potato, etc. Single issues have author index. These are cumulated annually and and published with a general index which is basically a host-parasite-geographical index for the previous 12 issues. Some 850 periodicals together with miscellaneous publications, books and other abstracting journals (Biological Abstracts, Bibliography of Agriculture, Chemical Abstracts, Dissertation Abstracts, Forestry Abstracts, etc.) are examined regularly. A list of these is given in volume 39, part 8, 1960 of the Review. Taxonomic papers are listed in the Bibliography of Systematic Mycology, while new generic and specific names of fungi are compiled in the Index of Fungi. -- Bookmark

L-128 Tobacco Abstracts: Citations and Abstracts World Literature on Nicotiana. (Tobacco Literature Service, North Carolina Agricultural Experiment Station). Raleigh, North Carolina, 1957- . Monthly (July/August as one issue).

A selective index to the international literature on all aspects of tobacco. Covers botany, chemical and physical properties, cultural practices, diseases, economics, genetics, health, insects, physiology, biochemistry, etc. Most of the citations are taken from 35 other abstracts and index services. Cumulated subject and author indices published annually. --Bookmark

L-129 Weed Abstracts, Compiled from World Literature. (Agricultural Research Council, Weed Research Organization, Commonwealth Agricultural Bureaux). Osford, England, 1953- . Bimonthly.

WA provides comprehensive up-to-date coverage of the world literature on weeds, weed control and allied subjects. To this end, a wide range of journals, annual reports, bulletins and other publications are regularly searched. Individual issues have only an author index and are arranged under the following headings: annual field crops, grassland and herbage crops, vegetable crops, ornamentals, fruit crops, forests, woody weeds, aquatic weeds, biology of weeds, physiology, herbicide patents, applications and machinery. Species, subject and author indices are provided annually. --Bookmark

L-130 Wheat Abstracts. (Nebraska Agricultural Experiment Station). Lincoln, Nebraska, 1963- . Monthly.

WA is a bibliography of the research literature on wheat currently received in the library of the University of Nebraska College of Agriculture. The portion of the holdings searched includes approximately 1,100 periodicals as well as the depository collection of USDA and state experiment stations publications. In addition to articles and monographs in English, it includes materials published in the Germanic or Romance languages or having titles and/or abstracts published in one of these languages. The bibliography does not include unsigned, initialed or pseudonymous works or editorials. --Preface. Each issue is arranged alphabetically by author under the following subjects: botany, cytology, genetics, culture, diseases and their control, insects, weeds and their control, preservation and storage, processing and packaging, analysis, biochemistry, industrial utilization, nutrition, economics, etc. --Bookmark

L-131 Zeitschrift fur Pflanzenernahrung, Dungung, Bodenkunde. (Deutsche Boden kunde Gesellschaft). Berlin, 1922- . Bimonthly.

Includes abstracts, book reviews; summaries given in English.

Four volumes per year of three numbers each.

Special References

L-132 Geographical Guide to Floras of the World. S. F. Blake and Alice C. Atwood. New York, Hafner Publishing Co., 1963.

Part I: Africa, Australia, North America, South America and the Islands of the Atlantic, Pacific and Indian Oceans.

Originally published in 1942, by the United States Department of Agriculture. An annotated selected list of floras and floristic works related to vascular plants, including bibliographies and publications dealing with useful plants and vernacular names. --Preface

Part 2: Western Europe. United States Department of Agriculture. Washington, D. C., 1961. Misc. Publication No. 797.

L-133 Index to Grass Species. Agnes Chase and Cornelia D. Niles. Boston, G. K. Hall & Co., 1962.

This index was begun some time prior to 1900 in the United States Department of Agriculture and covers literature from over the world containing names of grass species described from 1763 to 1962. It is still in progress, and a supplement will be issued when there are sufficient entries.

L-134 International Bibliography of Vegetation Maps. A. W. Kuckler, editor. Lawrence, Kansas, University of Kansas Libraries, 1965.

Volume I: North America; there will be three volumes.

L-135 Natural Vegetation of the World. Rand McNally & Co., Inc. Chicago, Illinois, Field Enterprises Educational Corporation, 1964.

A colored map published as part of the World Book Atlas.

L-136 World List of Plant Breeders. Food and Agriculture Organization of the United Nations. Rome, 1952.

Wildlife

Abstracts, Bibliographies, Guides to Research

L-137 Age Determination of Wildlife. A Bibliography. Ruth M. Madsen, Washington, D. C., United States Department of the Interior Library, 1967.

Arranged into three major categories: Birds, Mammals, and Reptiles and Amphibians, 864 entries.

L-138 Convention Proceedings. (International Association of Game, Fish and Conservation Commissioners). Boston, 1902- . Annual.

The business of the annual convention includes addresses from guest speakers, committee reports, commentary and resolutions on current issues, etc. Volumes include membership lists, bylaws, cumulative indices to annual proceedings, committee appointees, and offices, etc.

L-139 Journal of Wildlife Management. (Wildlife Society). Menasha, Wisconsin. Cayuga Press, 1937- . Quarterly.

A journal of research, notes and reviews. Annual author, subject, and title index published with October volume.

L-140 Pittman-Robertson Quarterly. (United States Department of the Interior. Fish and Wildlife Service). Washington, D. C., 1941-54. Quarterly.

Progress reports on research conducted by State and territorial agencies under the Federal Aid to Wildlife Restoration Act.

L-141 Transactions of the North American Wildlife and Natural Resources Conference. (Wildlife Management Institute). Washington, D. C., 1936- . Annual.

Papers and discussions of the scientists, research workers, biologists, state and national administrators, breeders, and citizens who attend the meeting. For proceedings prior to 1936, see the Proceedings of the American Game Association (from 1928).

L-142 Wildlife Abstracts. (United States Department of the Interior, Fish and Wildlife Service). Washington, D. C., 1935- . Irregular.

A non-annotated bibliography of wildlife research around the world and index to articles in Wildlife Review (below). There exist three volumes to date: 1935-1951; 1952-1956; and 1956-1960 (published in 1964).

L-143 Wildlife Monographs. (Wildlife Society). Menasha, Wisconsin. 1958- . Irregular.

Contains the longer papers and reports which connot be included in the Journal of Wildlife Management.

L-144 Wildlife Research Programs Progress. (United States Department of the Interior, Fish and Wildlife Service). Washington, D. C., 1954- .

Successor to Pittman-Robertson Quarterly.

L-145 Wildlife Review. (United States Department of the Interior, Fish and Wildlife Service, Bureau of Sport Fisheries). Laurel, Maryland, Pautuxent Wildlife Research Center, 1935- . Quarterly.

An abstracting service for wildlife management issued for the information of cooperators. --Title Page. Includes articles from international sources on general conservation, plants, wildlife, mamals, birds, reptiles, amphibians, invertebrates. Author index.

Special References

L-146 Federal Aid in Fish and Wildlife Restoration. Report. Prepared in the Bureau of Sport Fisheries and Wildlife. United States Department of the Interior. Washington, D. C., Wildlife Management Institute and Sport Fishing Institute, 1946- . Annual.

L-147 National Survey of Fishing and Hunting, 1960. United States Department of the Interior, Fish and Wildlife Service). Washington, D. C., 1961.

Circular No. 120.

L-148 A New Dictionary. Covering Birds of the World. A. Landsborough Thompson, editor. New York, McGraw-Hill Book Co., 1964.

SECTION M

CLIMATOLOGICAL RESOURCES

Climatic Data

Relevant information will also be found in sections dealing with the atmospheric sciences (D) and the quality of the environment (X). Note that as of July 13, 1965, the Coast and Geodetic Survey and the Weather Bureau, prime sources of climatic data, merged to become the Environmental Sciences Services Administration.

Research and Statistics

M-1 Climates of the States. United States Department of Commerce, Weather Bureau. Washington, D. C., 1961.

Issued for the states and outlying areas, 1959-61. (Climatography of the United States, No. 60).

M-2 Climates of the World. Rand McNally and Co. Chicago, Field Enterprises Educational Corporation, 1964.

A colored map found in the World Book Atlas.

M-3 Climatological Data, National Summary. (United States Department of Commerce, Weather Bureau). Washington, D. C., 1952- . Monthly.

Contains climatic analyses of weather of the month and river and flood conditions; tabulations of surface and upper air climatic data; solar radiation; climatic charts. Annual summary.

M-4 Climatological Data, State or Section Summaries. (United States Department of Commerce, Weather Bureau). Washington, D. C., 1914- . Monthly.

There exist 47 sections: 44 are individual states or groups of states, one each for Puerto Rico and the Virgin Islands, the West Indies and the Pacific area. Annual summaries.

M-5 Monthly Climatic Data for the World. (United States Department of Commerce, Weather Bureau). Washington, D. C., 1948- . Monthly.

Monthly mean surface temperature, pressure and humidity, and departure from normal, and total precipitation, precipitation quintiles and the number of days with one mm or more of rainfall, are published for all areas for which data can be obtained. Upper air data include mean height, temperature, dew point and resultant wind direction and speed for the pressure levels 850, 700, 500, 300, 200, 150, and 100 mb. Published about one month after the heading date. --Title Page.

M-6 Monthly Weather Review. (United States Department of Commerce, Weather Bureau). Washington, D. C., 1872- . Monthly.

Contributions principally in the branches of synoptic and applied meteorology. Interpretive review and charts of the weather of the month in the United States and adjactent areas.

M-7 Weather Reports: Stations, Codes, Transmissions. World Meteorological Organization, Geneva, 1964.

Vol. A: Nomenclature of stations; Vol. B: Codes; Vol. C: Transmissions; Vol. D: Meteorological Broadcast Schedules.

M-8 WMO Bibliography on Climatic Fluctuations. World Meteorological Organization. Geneva, 1961.

M-9 Addendum: Climatic Maps of the United States: Normal Monthly Total Precipitation (inches), 1931-60. Office of Data Information, Environmental Science Services Administration, United States Department of Commerce. Washington, D. C., 1963.

Updating of Atlas of Climatic Types in the United States, 1900-1939. United States Department of Agriculture, Soil Conservation Service, Washington, D. C., 1941. Misc. Publication No. 421.

Water, Including Hydrology, and Sedimentation

Data on water resources are collected according to usage (withdrawal, flow, onsite demands, and demands for streamflow as such); to water user demands (the major useres being municipal, thermal-electric power generation, manufacturing and irrigation). The Public Health Service has carried mafor responsibility for water quality surveilance from 1912 to May of 1966 (its functions in this field being assumed by the Department of the Interior); the Federal Power Commission collects statistics pertaining to thermal-electric power use; the Bureau of the Census collects industrial use statistics; the Army Corps of Engineers, Bureau of Reclamation, Tennessee Valley Authority, and other regional bodies publish most of the material on water resource development in their respective areas; the United States Geological Survey has also undertaken much of the geophysical and related research. The recent work of the Senate Select Committee on Water Resources, whose reports were published as a series of committee prints in 1960, organizes much valuable information from many sources. Print number one contains an extensive bibliography. Water Resources Research Centers, operating in each of the 50 states and in Puerto Rico since 1956-66, will provide additional sources of information.

Data on water resources simply do not exist for large portions of the world. Rather, data are collected by project, particularly in river basin development, and it is hoped that there will eventually have been enough profects to fill our gaps of knowledge. An effort was made toward international coordination of water resources information through the establishment of a Water Resources Development Center within the United Nations in 1964. To date, the Center has remained almost totally inactive. It is hoped that much will be accomplished during the present international Hydrological Decade and in related oceanographic research programs.

European information is fairly complete. The Economic Commission for Asia and the Far East has conducted a project by project water survey; the reports are available in their Water Resources Series. Fairly extensive surveys were also taken by the international commission sponsoring the development of the Mekong River Basin. The Arid Zone Research Series of UNESCO is the most comprehensive source of information on water-deficient areas.

Abstracts, Bibliographies, Indexes

M-10 Annotated Bibliography on Hydrology and Sedimentation: United States and Canada, 1955-1958. Interagency Committee on Water Resources. Washington, D. C., United States Geological Survey, 1962.

An index to a selected list of papers, articles, and books arranged alphabetically by author. Every effort has been made to include all listings of significant technical value in the fields of hydrology and sedimentation as well as articles in many allied sciences. It does not include articles on construction of water-resources developments, articles describing methods of making chemical and biochemical water analyses, articles of local interest only, articles in a semi-popular style which report the findings given in other papers, theses and reports having limited circulation. Each article is indexed by primary subject and by geographic area if applicable. --Introduction

A list of sources from which material was taken has been placed in the front. This bibliography brings up to date the earlier reports: Annotated Bibliography of Hydrology (1951-54) and Sedimentation (1950-54); Annotated Bibliography on Hydrology (1941-50), an extension of the International Bibliography of Hydrology begun by the American Geophysical Union in 1936; and Annotated Bibliography on Sedimentation, estimated to contain over 90 percent of important translations of

M-11 Annotated Bibliography on Hydrology and Sedimentation: United States and Canada, 1955-58, (con't.)

foreign-language articles contained in the fields of the Corps of Engineers, the Natuional Bureau of Standards and the Soil Conservation Service. --Bookmark

M-12 Benefit-Cost Analysis for Water Resources Projects, Selected Annotated Bibliography. United States Tennessee Valley Authority, Washington, D. C., 1967.

Concerned with the economic feasability and direct benefits for water research projects. Emphasis placed upon: 1) flood control, 2) navigation, 3) pollution (quality) control and, 4) Recreation. Also includes a basic works category.

M-13 Bibliography of African Hydrology. J. Rodier. Paris, United Nations Educational, Scientific and Cultural Organization, 1963.

A compilation of all writings and surveys contributing to the development of knowledge of the hydrology of the African continent. One of a series on African resources. Natural Resources Research II.

M-14 Bibliography of Hydrometry. Steponal Kolupaila. Paris, University of Notre Dame Press, 1961.

A very important bibliography containing 7,370 titles of papers in more than 30 languages. Entries are arranged under the headings: Water stage observations, runoff determination, hydrometric instruments, area velocity method, rating of hydrometric instruments, velocity methods in conduits, tracer methods, orifices and nozzles, venturimeters, weirs and flumes, modern physical methods of flow measurement, sediment measurements, hydrometeorological measurements, depth measurements, etc. --Bookmark

M-15 Bibliography of Saline Water Conversion Literature. J. J. Schamus. Washington, D. C., United States Department of the Interior, 1965.

Reasearch and Development Progress Report No. 146.

M-16 Bibliography on Irrigation, Drainage, River Training, and Flood Control. (International Commission on Irrigation and Drainage). New Delhi, 1954- . Irregular.

M-17 Bibliography on Socio-Economic Aspects of Water Resources. H. R. Hamilton, D. H. Owens, T. E. Carroll, A. R. Glenn, and B. A. Gilmour of Battelle Memorial Institute. Washington, D. C., United States Department of the Interior, Office of Water Resources Research, 1966.

Contains material published largely between 1955 and 1965; includes both an author and a title index.

M-18 Bibliography, Selected, on Evaporation and Transpiration. Thomas W. Robinson. United States Geological Survey, 1961.

Water-Supply Paper No. 1539-R.

M-19 Books on Aquatic Biology; fresh-water and marine. Carl R. Keeler. Tallahassee, Florida, Facile Press, 1965.

Outgrowth of the author's work published as Biological Sciences Communication Project communique 12-63, by the American Institute of Biological Scientists and George Washington University, in 1963.

M-20 Cooperative Water Resources Research and Training. (United States Department of the Interior, Office of Water Resources Research). Washington, D. C., 1965- . Annual.

Describes the activities of the Office of Water Resources Research, the results of these activities, and provides lists of researchers and projects provided for by the Water Resources Research Act of 1964.

M-21 Estuaries. George H. Larff, editor. Washington, D. C., American Association for the Advancement of Sciences, 1967.

A collection of 71 papers presented at the Conference on Estuaries, held at Jekyll Island, Georgia, in April, 1964. Categories of arrangement include basic considerations, physical factors, microbista ecology and populations, and human influences. Includes a bibliography of papers published since the Conference.

M-22 Hydata. (American Water Resources Association). Urbana, Illinois, 1966- . Monthly.

A monthly title list and index of the world's scientific literature in water resources. Includes a key-term index to words in the titles of articles indexed.

M-23 Index to Catalog of Information on Water Data. United States Department of the Interior, Geological Survey, Office of Water Data Coordination. Washington, D. C., 1967.

An index divided into four categories which correspond with the categories of the sections of the Catalog of Infromation on Water Data. The categories are: Water Quality Stations, Surface Water Stations, and Ground Water Stations. The fourth category is concerned with areal hydrologic investigations and miscellaneaous activities which include acquisition of water data as part of the overall study.

M-24 Index to the Proceedings, Journal and Other Publications of the American Water-Works Association, 1881-1939, Inclusive. New York, American Water-Works Association, 1940.

M-25 Journal of Hydrology. (Hydrology Editorial Advisory Board). Amsterdam, the Netherlands, 1963- . Quarterly.

Contains articles dealing with all aspects of ground water, surface water, and measurement techniques; also includes book reviews and notes.

M-26 Literaturberichte uber Wasser, Abwasser, Luft und Boden. (Verein fur Wasser, Boden und Lufthygiene and Institut fur Wasser-Boden, und Lufthygiene Buadesgesundheltsawot). Stuttgart,Germany, 1950- . Six times a year.

Abstracts and bibliographical references.

M-27 National Watershed Congress, Proceedings. United States Congress). Washington, D. C., 1954- . Irregular.

M-28 Oceanic Index. (Oceanic Research Institute). La Jolla, California, 1964- . Annual.

An index to publications and articles in the fields of oceanography and marine science. Articles are indexed by Key words in the titles.

M-29 Proceedings. Conference on Great Lakes Research. (Internation Association for Great Lakes Research). Ann Arbor, Michigan, 1955- . Annual.

M-30 Proceedings of the First International Symposium on Water Desalination. United States Department of the Interior, Office of Saline Water. Washington, D. C., 1965.

Three volumes, containing papers presented at the symposium, plus summaries of discussions. Also includes a list of registrants and a summary of the symposium.

M-31 Schweizerische Zeitschrift fur Hydrologie. (Schweizerische Naturforschende Gesellschaft). Aardu, Switzerland, 1929- .

M-32 Selected Bibliography on Laboratory and Field Methods in Ground-water Hydrology. A. I. Johnston. Washington, D. C., Superintendent of Documents, 1964.

United States Geological Survey, Water Supply Paper No. 1779-Z.

M-33 Selected Papers on Desalination and Ocean Technology. Sumner N. Levine, editor. New York, Dover Publications, Inc., 1968.

Two dozen papers on the general technology and economics of salt water, and specific desalination techniques. Papers include bibliographies.

M-34 Selected Water Resources Abstracts. (United States Department of the Interior, Office of Water Resources Research). Washington, D. C., 1969- . Monthly.

A semi-monthly journal, containing abstracts of current and earlier monographs, articles, reports, and other publication formats. Each abstract includes a set of descriptors or identifiers which are listed in the Water Resources Thesaurus. Entries are classified into ten fields and sixty groups similar to the water resources research categories established by the Committee on Water Resources Research.

M-35 Water and Water Use Terminology. J. O. Veatch and C. R. Humphreys. Kaukauna, Wisconsin, Thomas Print and Publishing Co., 1966.

Defines terms in the fields of limnology, geology, economics, hydrology, ecology and engineering which pertain to all aspects of lakes, standing waters, and related wetlands. Illustrated.

M-36 Water Facts, Sources, Supply, Needs, Uses, Losses, Floods, Conservation. (U. S. Department of Agriculture). Washington, D. C., 1964.

A monthly catalog of publications available through the Government Printing Office.

A previous edition was issued in August 1957. It is a part of the Program Aid Series of the Department of Agriculture.

M-37 Water for Peace. International Conference on Water for Peace. Washington, D. C., 1967.

A set of eight volumes containing papers delivered at the International Conference on Water for Peace, held in Washington, D. C., May 23-31, 1967.

M-38 Water Law Bibliography, 1847-1965. J. Myron Jacobstein and Roy M. Mersky. Silver Spring, Md., Jefferson Law Book Company, 1966.

Classified into general, economic, political, and technical aspects of water law, with the major portion devoted to publications on water law in industrial states. A supplement, published in 1969, provides new material in the original areas plus a new area, devoted to water pollution legislation.

M-39 Water Resources Development: 1950-1965. Hanan Wellisch, Jerusalem, Israel Program for Scientific Translations, 1967.

A bibliograph listing monographs, serials, and abstracting and indexing services in water resources. Approximately two thousand entries.

M-40 Water Resources Research. (American Geophysical Union). Baltimore, 1965- . Quarterly.

M-41 Water Resources Research. (American Geophysical Union). Washington, D. C., 1965- . Quarterly.

M-42 Water Resources Research Catalogue. (United States Department of the Interior, Office of Water Resources Research). Washington, D. C., 1965- . Irregular

First edition was prepared by the Science Information Exchange of the Smithsonian Institute. Included subject index, corporate author index, principal investagator index, and supporting agency index.

Vol. 1, Part 1: Federally Supported Research Programs.

M-43 Water Resources Series. (United Nations, Economic Commission for Asia and the Far East, Bureau of Flood Control and Water Resource Development). Bangkok, 1950- . Irregular.

Collections of papers of conference proceedings, case studies, research monographs, developments in technology, methodology, etc. See especiallu N. 24: Development of Groundwater Resources with Special Reference to Deltaic Areas (1962); N. 25: Proceedings of Regional Symposium on Flood Control, Reclamation, Utilization and Development of Deltaic Areas; N. 26: Manual of Standards and Criteria for Planning Water Resources Projects.

Special and Statistical References

M-44 Annual Rainfall of the World. Rand McNally & Co., Chicago. Field Enterprises Educational Corporation, 1964.

One sheet with variability of annual rainfall and zones of precipitation in the World Book Atlas.

M-45 Daily River Stages. (United States Department of Commerce, Weather Bureau). Washington. D. C.. 1858- . Annual.

M-46 Draft of a General Scientific Framework for World Ocean Study. (United Nations Educational, Scientific and Cultural Organization. Paris, 1965.

M-47 Hourly Precipitation Data. (United States Department of Commerce, Weather Bureau). Washington, D. C., 1938- . Monthly with annual summary.

M-48 Manual on International Oceanographic Data Exchange. United Nations Educational, Scientific and Cultural Organization, International Oceanographic Commission. Paris, 1965.

Technical Serie N. 1.

M-49 Report. United States President's Water Resources Policy Commission. Washington, D. C., 1950.

V. I: A Water Policy for the American People (General Report).
V. II: Ten Rivers in America's Future; V. III: Water Resources Law.

Also, Summary of Recommendations: A Water Policy for the American People.

M-50 Research and Development Progress Reports. (United States Department of the Interior, Office of Saline Water). Washington, D. C., 1966- . Irregular.

A series of reports dealing with desalination of water and the economics of its application; over 400 such reports were published between September 1966 and April 1969.

M-51 Water Atlas of the United States: Basic Facts About the Nation's Water Resources. David W. Miller. Port Washington, Long Island, New York, Water Information Center, Inc., 1963

Colored plates showing supply sources, uses in various economic activities, hydrologic data, etc. The Center is a private firm, acting as consultants internationally, with much of their work done for or in cooperation with the United Nations. They review and disseminate published and unpublished material, through publications such as Water Newsletter (bimonthly), a supplementary Research and Development News, and Water Supply, Waste Disposal and Conservation.

M-52 Water Research. International Association of Water Pollution Research. Pergamon Press, Oxford, 1967.

Formed from the division of the International Journal of Air and Water Pollution. Contains articles on the chemistry, biology and technology of water and waste treatment, and on instrumentation and methods in water quality research.

M-53 Water Resource Activities in the United States. United States Senate, Select Committee on Water Resources. Washington, D. C., Superintendent of Documents, 1960.

A series of reports on all aspects of water resource activities. Issued as Committee Prints.

M-54 Water Resources Thesaurus. U. S. Department of the Interior, Office of Water Resources Research. Washington, D. C., 1966.

A list of describers and cross-references in the field of water resources research; also a list of 29 describer groups.

SECTION N

MINERAL AND ENERGY RESOURCES

Minerals

Domestic and European literature is almost as abundant for minerals as it is for agriculture due to the key role which such materials play in industrial development and national security. Mineral resources become "capital" more readily and directly than most other resources. Much of the relevant information, therefore, will be available through organizations in engineering and industrial phases of production (See Section K. "Metallurgical Engineering," Section S. "Mining and Manufacturing."). Major United States sources of information on minerals and materials research at the primary stages are governmental, notably the Bureau of Mines, the Geological Survey, the Departments of Commerce and Defense. The mineral resources of much of the world remain unexplored (Note, however, the work of the Economic Commission for Asia and the Far East, available in its Mineral Resources Series.). In many cases minerals sources have been the property of American, Canadian and European firms: data on these economic enclaves would appear in the reports of particular firms and trade associations. As in the domestic context, other sources of data are the professional engineering and scientific societies and study and trade organizations of particular commodities (copper, lead, tin, zinc) and industries (aluminum, iron and steel, etc.). Check the sections on science and technology, economic and social organization, earth sciences, energy production for guides to related research.

General Sources

N-1 JMM Abstracts. (Institution of Mining and Metallurgy). London, 1950- Bimonthly.

A survey of world literature on the economic geology and mining of all minerals, except coal, mineral dressings and non-ferrous extraction metallurgy. --Title Page

N-2 List of Journal Articles by Bureau of Mines Authors, Published July 1, 1910 to January 1, 1960. Editors: Mae W. Hardison and Opal V. Weaver. Washington, D. C., Superintendent of Documents, 1960.

Subject index to the nearly 9,000 articles written by Bureau personnel and published during the past 50 years in scientific and technical journals, the trade press, convention proceedings, and other non-Bureau publication. --Foreword

N-3 List of Publications Issued by the Bureau of Mines from July 1, 1910 to January 1, 1960. United States Department of the Interior, Bureau of Mines. Washington, D. C., Superintendent of Documents, 1960.

Subject and author index to more than 7,500 listings of virtually all scientific and technical publications issued by the Bureau of Mines during its half century of existance. Publications cover mineral industries, developments in mine safety and health, research in the extraction, processing and utilization of metals, non-metallics and mineral fuels. --Foreword. It is kept current by a monthly "New Publications" and by annual cumulations of these monthly lists. --Bookmark

N-4 Metals Handbook. American Soceity for Metals, Metals Park, Ohio, 1961.

Eighth edition.

N-5 Metals Reference Book. C. J. Smithells. London, Buttersworth, 1962.

Third edition.

N-6 Metals Review; the News Digest Magazine. (American Society for Metals). Metals Park, Ohio, 1930- . Monthly.

N-7 Mineral Facts and Problems. United States Department of the Interior, Bureau of Mines. Washington, D. C., 1965.

Statements on mineral commodities, each prepared by Bureau and other esperts, including physical and technical properties, indeustrial characteristics and use of technology, economic patterns and political policies and factors in minerals production, trade, and consumption.

Third edition.

N-8 Mineral Resources Development Series. (United Nations, Economic Commission for Asia and the Far East). Hong Kong, 1952- . Irregular.

Compilations of papers on technological developments, scientific research, conference reports and proceedings, case studies, etc., on mineral resource development projects in the Asian region.

N-9 Mineral Resources: Geology, Engineering, Economics, Politics, Law. Peter T. Flawn. Chicago, Illinois, Rand McNally and Company, 1966.

A general view of mineral resources as they relate to the five topics presented in the title.

N-10 Mineralogical Abstracts. (Mineralogical Soceity of Great Britain and Mineralogical Society of America). London, 1920- . Quarterly.

Volumes 1-13 (1920-1958) were issued as supplements to the Mineralogical Magazine. Beginning with Volume 14, abstracts were issued as separates. Individual issues have author index only. Subject and topographical indices come with annual volumes. Abstracts are grouped according to the following topics: age determination and isotope mineralogy, apparatus, clay minerals, crystal structure, economic minerals and ore deposits, experimental mineralogy, gemstones, geochemistry, mineral data, new minerals, physical properties, etc. See also Chemical Index of Mineral Species and Varieties by M. H. Hey, published in 1955.

N-11 Mineralogical Journal. (Mineralogical Society of Japan). Tokyo, 1953- . Irregularly.

An abstracting journal. Text in English.

N-12 Minerals Yearbook. (United States Department of the Interior, Bureau of Mines). Washington, D. C., 1933- . Annual.

As of 1963, issued in four volumes: I, Minerals, Excluding Fuels; II, Fuels: III, Area Reports, Domestic; IV, Area Reports, International.

Format is similar to that of Mineral Facts and Problems (See above), including technologic, economic, industrial, and political data.

N-13 Zentralblatt fur Mineralogie. Teil I: Krostalographie Mineralogie. Stuttgart, E. Schweitzerbart Verlagsbuchhandlung, 1807- . Quarterly.

N-14 Zentralblatt fur Mineralogie. Teil II: Gesternskunde, Technische Mineralogie, Geochemie und Lagerstattenkunde. Stuttgart, 1950- . Seven times a year.

Specific Minerals and Metals

N-15 Aluminum Abstracts. (Centre Internationale de Development de l'Aluminium). Paris, 1963- . Fortnightly.

Surveys current literature on the production, fabrication, and uses of aluminum and its alloys and on related scientific and technical subjects.

N-16 Copper Abstracts. (Copper Development Association). London, 1959- . Monthly.

Abstracts of world's literature on corrosion and corrosion mitigation. --Title page

N-17 Lead Abstracts. (Lead Development Association). London, 1958- . Monthly.

A review of recent technical literature on the uses of lead and its products.

Energy Fuels

General Note

See note to Section V, Energy Production," and Earth Sciences.

Abstracts, Bibliographies, Indexes

N-18 Zinc Abstracts. (Zinc Development Association). London, 1943- . Monthly.

Formerly ZDA Abstracts.

N-19 Bibliography on Hydrocarbons, 1946-1960. A. Huckleroy. Tulsa, Oklahoma. Natural Gas Processors Association, 1962.

N-20 A Century of Oil and Gas in Books. E. B. Swanson. New York, Appleton-Century-Crofts, 1960.

N-21 Comprehensive Index of the Publications of the American Association of Petroleum Geologists. (American Association of Petroleum Geologists). Tulsa Oklahoma, 1917- .

Supplemented by yearly indexes.

N-22 Fuel Abstracts and Current Titles. (Institute of Fuel). London, 1960- . Monthly.

A summary of wrold literature on all technical and scientific aspects of fuel and power.

N-23 Gas Abstracts. (Institute of Gas Technology). Chicago, 1945- . Monthly.

N-24 Hydrocarbon Processing and Petroleum Refiner. (Gulf Publishing Co.). Huston, Texas, 1922- .

See the Digest of Recent U. S. Patents pertaining to Petroleum Refining.

N-25 Petroleum Abstracts. (Petroleum Abstracts Advisory Committee, University of Tulsa). Tulsa, Oklahoma, 1961- . Weekly.

N-26 United States Sources of Petroleum and Natural Gas Information. Margaret M. Rocq. New York, Special Libraries Association, 1961.

Index to 231 publications: Government documents, trade association, and company organs. Statistics on derived chemical products, and those combining coal and petroleum are not included. Arranged by reference source, by subject, and type of data. Includes a list of composite statistical sources which include petroleum and natural gas.

Special Reference Works

N-27 Advances in Petroleum Chemistry and Refining, (Interscience), New york, 1958- . Annual.

N-29 Drilling and Production Practice. (Central Committee on Drilling & Production Practice, American Petroleum Intstitute). New York, 1934- . Annual.

N-29 Energy Resources of the World. United States Department of State. Washington, D. C., 1949.

Publication No. 3428.

Primarily of historical interest. Data given for 1937, with no historical examination. Includes maps, charts, tables. Compiled pursuant to developing foreign policy.

N-30 New Sources of Energy, Proceedings of the Conference. United Nations Conference on New Sources of Energy. New York, United Nations, 1963-65.

Seven volumes: Vol. I: General Sessions. Vol. II and III: Geothermal Energy. Vols. IV-VI: Solar Energy. Vol. VII: Wind Power.

Discussions by international experts concerning resources, needs, technology and economic availability of non-conventional sources of energy; conference held in Rome on August 21-31, 1961.

N-31 Oil and Petroleum Yearbook. London, W. E. Skinner, Ltd., 1910- . Annual.

N-32 Reviews of Petroleum Technology. (Institute of Petroleum). London, 1935- . Annual.

N-33 The Science of Petroleum. A. E. Dunstan, editor. New York-London. Oxford University Press, 1953. Six volumes.

A Comprehensive treatise of the principles and practice of the production, refining, transport, and distribution of mineral oil.

N-34 Statistics of Oil and Gas Development and Production. (Society of Petroleum Engineers, AIME). New York, vols. 1-13, 1945-1958. Annual.

See also: International Oil and Gas Development, from 1959.

SECTION O

HUMAN RESOURCES--POPULATION CHARACTERISTICS

Bibliographies and Guides to Research

O-1 A Bibliographic Guide to Population Geography. Wilbur Zelensky. University of Chicago, Department of Geography, 1962

Research Paper No 80.

Bibliographic data on 1,599 items in 26 languages, given in the western alphabet. The median year of citations is 1948.

O-2 Bibliographie des etudes demographiques relatives aux pays en voie de developments. Institute national de la statistique et des etudes economiques. Paris, 1961.

Covers works which have appeared since 1945.

O-3 Fertility Abstracts; fertility, sterility, conception. (Family Center, Ltd.). London, 1962- . Monthly.

O-4 International Repertory of Institutions Conducting Population Studies. United Nations Educational, Scientific and Cultural Organization. Paris, United Nations, 1959.

Reports and Papers in the Social Sciences II.

O-5 The Materials of Demography; A Selected and Annotated Bibliography. Hope T. Eldredge, for the International Union for the Scientific Study of Population and the Population Association of America. New York, Columbia University Press, 1959.

Presents only English language publications; other languages will be issed separately. Includes basic works and essential reference sources and studies on problems in population analysis.

O-6 Population Bulletin. (Population Reference Bureau, Inc.). Washington, D. C., 1945- . Six times a year.

Their intent is to publish "factual background information on population trends and their economic and social effects, . . . to provide and interpret facts of population change and relate them to world affairs." They claim a "non-controversial approach"as an information service.

O-7 Population Index. (Office of Population Research, Princeton University, and Population Association of America). Princeton, N. J., 1935- . Quarterly.

Includes articles on current issues and an annotated bibliography of studies, articles, statistical publications, excluding recurring compilations of official statistics listed in bibliographies of the United Nations Demographic Yearbook. Coverage is international in scope, including regional studies spatial distribution, trends in population size, mortality, fertility, natality, migration, characteristics and relations with other fields, policy, research, and analysis. Also reports on professional meetings and conferences, new periodicals, current bibliographies.

Statistical Information

O-8 Current Population Reports. (United States Department of Commerce, Bureau of the Census). Washington, D. C., 1942-1959. Irregular.

Issued in two series: Population Characteristics (P-20); Population Estimates (P-25).

C-9 Demographic Yearbook. (United Nations, Statistical Office). New York, 1948- . Annual.

Includes tables on the economic variables of population characteristics, natality, infant and general mortality, life espectancy rates, mupitality and divorce, plus world summaries. Also a chapter of technical notes on statistical tables and a cumulative subject index.

C-10 International Population Statistics Reports. (United States Department of Commerce, Bureau of the Census). Washington, D. C., 1952- . Irregular.

Studies of population, manpower, and related topics for selected foreign countries, based on available data.

C-11 Monthly Vital Statistics Reports. (United States Department of Health, Education and Welfare, Public Health Service). Washington, D. C., 1952- . Monthly.

C-12 Population and Vital Statistics Reports. (United Nations, Statistical Offices). New York, 1949- . Quarterly.

Contains the latest census returns and official estimates of population, estimates for the preceeding year, and the latest birth and death statistics.

C-13 Vital and Health Statistics. (United States Department of Health, Education, and Welfare, Public Health Service). Washington, D. C., various dates.

Program descriptions, methodological research, and anlytical studies of vital and health statistics.

Composite source.

C-14 Vital Statistics of the United States. (United States Department of Health, Education and Welfare, Public Health Service). Washington, D. C., 1957- . Annual.

Special References

0-15 Vital Statistics--Special Reports. (United States Department of Health, Education and Welfare, Public Health Service). Washington, D. C., 1936- . Irregular.

National summaries.

0-16 World Health Statistics Annual. (World Health Organization). Geneva, United Nations, 1948- . Annual.

The annual is now in three volumes: I: Vital Statistics and Causes of Death; II: Infectious Diseases: Cases, Deaths, Vaccinations; III: Health Personnel and Hospital Establishments. Published in cooperation with the Statistical Office of the United Nations. Publication is about three years behind coverage. Of special note is the 1962 edition.

Formerly: Annual Epidemiological and Vital Statistics.

0-17 World Population, an Analysis of Vital Data. Nathan Keyfitz and Wilhelm Flieger. Chicago, Illinois, The University of Chicago Press, 1968.

A collection of demographic data based upon population statistics from all countries, compiled with a computer.

0-18 National Programmes of Population Census Data as an Aid to Planning and Policy-Making. United Nations, Department of Economic and Social Affairs. New York, United Nations. 1964.

Population Studies No. 36.

0-19 Population of the World. Rand McNally & Co. Chicago, Field Enterprises Educational Corporation, 1964.

A colored map, found in the World Book Atlas.

SECTION P

COMPOSTIE AND ORGANIZATIONAL SOURCES

It goes without saying that the information requirements of researchers here will be many-fold. Composite social and economic statistical data are often inadequate; the user will wish to consult particular figures of a specialized group or agency. These references will be invaluable.

P-1 Conservation Directory; A Listing of Organizations, Agencies and Officials Concerned with Natural Resources Use and Management. (National Wildlife Federation). Washington, D. C., 1919- . Annual

The scope of the publication includes U. S. Government agencies; international, national, and interstate commissions; national and international organizations; colleges and universities; agencies and organizations in states and U. S. government territories; Canadian government agencies and citizens' groups, and provincial and territorial agencies and citizens' groups. Includes information of scope and purpose of each organization. International organizations are primarily those of the United States and Canada.

P-2 Dictionary Catalogue of the United States Department of the Interior Library. Boston, G. K. Hall, 1967.

P-3 Encyclopedia of Associations, Fourth Edition. Gale Research Co. Detroit, Book Tower, 1964.

Lists and describes 12,900 national associations, societies, federations, chambers of commerce, unions, and other non-profit membership organizations. Under each listing is shown name, headquarters, address, acronym, description of membership, activities, purposes, research and education programs, publications, etc. Organizations are grouped by field. Volume II is a geographic and executive index. Updated bimonthly by New Associations.

P-4 Monthly Catalog of United States Government Publications. (United States Government Printing Office). Washington, D. C., 1895- . Monthly.

P-5 United States Government Organization Manual. (United States General Services Administration, National Archives and Records Service, Federal Register Division). Washington D. C., 1935- . Annual.

The handbook of the Federal Government. It contains sections describing the agencies of the legislative, judicial, and executive branches, brief descriptions of quasi-official agencies, and of selected international organizations. Included as supplemental information are charts of some of the more complex agencies, brief histories of agencies abolished or transferred since 1933, lists of Government publications, and references showing where agency rules are published in the Code of Federal Regulations. --Foreword

P-6 World List of Future International Meetings. (United States Library of Congress, International Organizations Section). Washington, D. C., 1959-661 Monthly; 1967- . Bimonthly.

Each issue is in two parts: Part I listing meetings in the fields of science, technology, agriculture, medicine (published in cooperation with the National Science Foundation); Part II dealing with social, cultural, commercial, and humanistic fields. The March, June, September, and December issues list all international meetings scheduled for the ensuing three years; the remaining issues list new meetings and changes. Three indexes are provided at the end of each year: a subject index, a sponsor index of the local and international organizations cited as sponsors and convenors, and a geographical index to the place of the meeting. Information of the organizations may be found in the ULA handbooks, cited below.

P-7 Yearbook of International Organizations: 1964-65. Tenth Edition. Eyvind S. Tew. Belgium, Union of International Associations, 1965.

This publication has recieved the acclaim of the United Nations. Coverage includes: (1) The United Nations Family; (2) The European Community, including its non-governmental groupings; (3) Other inter-governmental organizations; (4) International non-governmental organizations, arranged by subject; (5) National organizations in consultive status with the United Nations, and several commentaries and charts demonstrating inter-governmental relations.

F-8 Bibliographies on International Relations and World Affairs: An Annotated Directory. Eric H. Boehm, editor. Santa Barbara, California, Clio Press, 1965.

Bibliography and Reference Series No. 2.

F-9 Economic and Social Development Plans: Africa, Asia and Latin America. United Nations, Dag Hammarskjold Library. New York, 1964, 1966.

A list of official documentation on economic and social development planning, with the exception of countries with centrally planned economies. Arranged by country, under continents or regional groupings. Cites responsible governmental organization and gives full bibliographic information. A second edition was printed in 1966.

F-10 Government-Wide Index to Federal Research and Development Reports. (United States Department of Commerce, National Bureau of Standards). Washington, D. C., 1965-66. Monthly; 1966- . Semi-monthly.

Provides a single source index to all government research and development reports by subject, author, source, and report number. See also the semi-monthly United States Government Research and Development Reports (C-24) which announces, indexes, and abstracts all of the approximately 2,000 new reports of government sponsored research through the Clearinghouse for Federal Scientific and Technical Information.

F-11 Historical Bibliographies: a systematic and annotated guide. Second Edition. Edith Margaret Coulter. New York, Russel and Russel, 1965.

P-12 Human Relations Area Files. New Haven, Human Relations Area Files, Inc., 1938- . Microfiche.

The files function as an information center for cross-cultural studies in all aspects of man and his culture, collect information on a sample of some 200 different societies and tribes. Researchers may consult files at 40 different member institutions. For information about the content and classification of the 50-plus drawers of cards, see Guide to the Use of the Files (1956), Outline of World Cultures, 3rd edition, Murdock (1963), and Outline of Cultural Materials, 4th edition, Murdock (1961).

P-13 Research Centers Directory, Second Edition. Gale Research Company. Detroit, Book Tower, 1965.

A revised edition of Directory of Research Bureaus and Institutes (1960). Contains information of the existence, location, activities, and fields of interest of more than 3,000 university-related and independent non-profit research units. Subject index. Updated quarterly by New Research Centers.

P-14 A Selected Bibliography: Asia, Africa, Eastern Europe, Latin America. American Universities Field Staff, Inc., New York, Vance Weaver Composition, Inc., 1960.

This volume has been used by many researchers since its publication. Its purpose was to select books and journals considered most useful to college study and general reading. Organized geographically, then by subject.

Supplement issued in 1965.

Statistical Data

P-15 Compendium of Social Statistics. (United Nations Statistical Office, International Labor Organization, Food and Agriculture Organization, United Nations Educational, Scientific and Cultural Organization). New York, 1964- . Annual.

This volume includes all sorts of cross-tabulations from the scattered statistical sources of the participating organizations. Categories include: Population, health, food consumption and nutrition, housing, educational and cultural activities, labor force and conditions of employment, social security, income and expenditure.

R-16 Historical Statistics of the United States: Colonial Times to 1957. (United States Department of Commerce, Bureau of the Census, and the Social Science Research Council). Washington, D. C., 1960- .

Updated by Continuation to 1963 and Revisions.

R-17 Monthly Bulletin of Statistics. (United Nations, Statistical Office). New York, 1947- . Monthly.

Probably the most frequently used international reference. Included is information on industrial production and employment, mining and manufactureing, world trade, transport, population, manpower, forestry, electricity and gas, national accounts, wages and prices, finance, etc. Each bulletin has a set of special tables repeated only periodically. Data are gathered from over 180 countries. Statistics are shown for approximately a seven-year period, with quarterly analyses of the most recent two years.

R-18 Statistical Abstract of the United States. (United States Department of Commerce, Bureau of the Census). Washington, D. C. 1878- . Annual.

Standard summary of statistics on the industrial, social, political, and economic situation of the United States.

R-19 Statistical Yearbook. (United Nations, Statistical Office). New York, 1948- . Annual.

Series include population, manpower, production and industrial employment indices, production and consumption for selected commodities and commodity groupings, transport and communications, internal and external trade, balance of payments summaries, wages and prices, finance and markets, public finance, social statistics, and education and culture.

R-20 Statistical Yearbook. (United Nations Educationa, Scientific and Cultural Organization). New York, 1963- . Annual.

As of 1963, the publication covered educational and cultural data, but was expected to include data on science and technology in the coming years.

P-21 Statistics Sources. Gale Research Company. Detroit, Book Tower, 1962.

Identifies primary and important secondary sources, with emphasis on American national publications, including agencies or trade organizations which are not identified with a particular publication. Arranged alphabetically by subject. Continued by Statistical Sources Review, monthly.

Special References

P-22 Keesings Contemporary Archives. Keesings Publications, Ltd., Bristol, England, 1931- . Weekly.

Weekly indexed diary of world events.

The Archives provide an authoritative summary of current events, including political, economic, and scientific activities.

P-23 World Handbook of Political and Social Indicators. Bruce M. Russett, et. al. New Haven, Connecticut, Yale University Press, 1964.

An "attempt to compare nations on a great variety of politically relevant indices . . . to present some of the data necessary for the further development of a science of comparative and international politics." --Preface. Many of the parameters have been formed in accordance with the elements in the Universal Declaration of Human Rights. Includes analysis of statistics sources and approaches to ways of using them in comparative political and social analysis.

SECTION Q

ECONOMIC AND FINANCIAL INDICATORS

Domestic

Q-1 County Business Patterns. (United States Department of Commerce, Bureau of the Census). Washington, D. C., 1946-51; 1953; 1956; 1959; 1962; 1964. Annual.

Prior to 1962 published by the Bureau of the Census and the Bureau of Old-Age and Survivors' Insurance.

Q-2 Economic Areas of the United States. Donald J. Bogue and Calyin L. Blake. New York Fress Press of Glencoe, 1961.

Studies in Population Distribution 15.

Attempt at a system of area classification for the regions of the United States, including basic data for each region and sub-region so classified.

Q-3 Economic Indicators. (United States Council of Economic Advisors). Washington, D. C., 1948- . Monthly.

Graphs, charts, tables, and discussion of the latest trends in national income, expenditure and saving, business activity, trade and finance, etc. Historical supplement issued irregularly; latest in 1964.

Q-4 Economic Report of the President. (United States President). Washington, D. C., Superintendent of Documents, 1948- . Annual.

The annual report of the President to Congress, summarizing the trends of the past year and projecting future policies and needs. Includes statistical tables.

Q-5 Federal Reserve Bulletin. (United States Board of Governors of the Federal Reserve System). Washington, D. C., 1915- . Monthly.

Includes analytical and informational articles on important current issues and detailed statistical tables on nearly every phase of economic life. See also the Bulletins of the banks of the twelve Federal Reserve regions.

Q-6 Handbook of Basic Economic Statistics: A Manual of Basic Economic Data on Industry, Commerce, Labor and Agriculture in the United States. (United States Department of Commerce, Office of Business Economics, Washington, D. C., 1947- . Monthly.

Current issues are kept up to date by monthly supplements.

Q-7 Income and Output. (United States Department of Commerce, Office of Business Economics). Washington, D. C., 1927- . Irregular.

Detailed tables of the various components of the Gross National Product and Income.

Q-8 Moody's Bank and Finance Manual: American and Foreign. (Moody's Investors Service, Inc.). New York, 1954- . Annual.

Q-9 Moody's Industrial Manual: American and Foreign. (Moody's Investors Service, Inc.). New York, 1954- . Annual

Q-10 Moody's Industrials. (Moody's Investors Service, Inc.). New York, 1929- . Semi-weeklv.

Q-11 Moody's Municipal and Government Manual: American and Foreign. (Moody's Investment Service, Inc.). New York, 1955- . Annual.

Q-12 Moody's Public Utility Manual. (Moody's Investors Service, Inc.). New York, 1954- . Annual.

Q-13 Survey of Current Business. (United States Department of Commerce, Office of Business Economics). Washington, D. C., 1921- . Monthly.

Statistical graphical, and textual information of national income, business developments and prospects, situational reports, foreign and domestic trade, financial developments, etc. See also the biennial statistical supplement, Business Statistics.

International

Statistical Data

Q-14 Commodity Yearbook. (Commodity Research Bureau). New York, 1939- . Annual.

Editorial comments and statistical tables, including production, salient characteristics, prices, and consumption for over 300 commodities.

Q-15 Comparative Statistical Tables of World Large Cities. (Tokyo Metropolitan Government, Bureau of General Affairs). Tokyo, 1961- . Annual.

Q-16 Current Economic Indicators. (United Nations, Statistical Office). New York, 1960- . Quarterly.

A statistical review of principal world economic indicators. Data given on three levels: global and regional, excluding centrally planned economies; underdeveloped areas; country data for six leading industrial countries.

Q-17 Direction of International Trade. (United Nations, Statistical Office). New York, 1950- . Monthly.

Prepared in cooperation with the International Bank for Reconstruction and Development and the International Monetary Fund. Excellent data on terms of trade, changes in values of exports and imports. Data presented for five years at a time.

Q-18 International Financial Statistics. (International Monetary Fund). Washington, D. C., 1948- . Monthly.

See especially the Supplement to 1964/65 Issues, which provides annual time series from 1948 and quarterly time series from 1957.

Country tables showing reserves, balance of payments, prices and other data; international tables on gold holdings, reserve positions, trade and prices, foreign exchange.

Annual Supplement.

Q-19 Supplements to the Basic Instruments and Selected Documents. (Contracting Parties to the General Agreement on Tariffs and Trade). Geneva, 1953-1966. Annual

Contains Decisions, Resolutions, Recommendations adopted by contracting parties at sessions which have taken place during the period covered by each volume. Thirteen supplements to July, 1965.

For further information on commodity trade, see Review of International Commodity Problems, Interim Coordinating Committee for International Commodity Agreements, United Nations, 1947-56; Operation of the Trade Agreements Program, published periodically since 1949 by the United States Tariff Commission; List of Official Materials Published by the Secretariat of the General Agreement on Tariffs and Trade; GATT Bibliography, published irregularly since 1954 (for non-official publications).

Q-20 World Economic Survey.(United Nations, Department of Economic and Social Affairs, Statistical Office). New York, 1945/47- . Annual.

Each issue is devoted to a particular problem. Papers are prepared by the Bureau of General Economic Research and Policies of the Department and where regular U. N. statistics are inadequate, they refer to specialized sources. Texts include charts, graphs, tables. The 1962 Survey was subtitled 'The Developing Countries in World Trade;" the 1963 issue on "Trade and Development: Trends, Needs and Policies" served as working papers to the GATT conference; the 1964 survey is entitled "Development Plans: Appraisal of Targets and Progress in Developing Countries."

Q-21 World Trade Annual. (United Nations, Statistical Office). New York. 1963- . Annual.

Intended as a guide to businessmen, but will prove invaluable for researchers. For the first year of publication in 1963, one can trace who exported what to whom and at what value for any commodity in the Standard International Trade Classification, for all 1,312 basic headings. This is the first such large-scale attempt at computer-permuted statistical reporting; unfortunately, detailed data exist only as far back as 1962.

Q-22 Yearbook of International Trade Statistics. (United Nations, Statistical Office). New York, 1951- . Annual.

Individual country series include: general historical trade, exports and imports by commodities, overall trade by principal countries of consignment and destination. No cross-tabulation between commodity and destination. Values given in local currencies.

Q-23 Yearbook of Labor Statistics. (International Labor Office). Geneva, 1936- . Annual.

A clear presentation of data on population and its economic characteristics: employment and unemployment, hours of work, wages, consumer price indices, family living studies, industrial accidents, industrial disputes. Uses the International Trade Classification of all economic activities.

Q-24 Yearbook of National Accounts Statistics. (United Nations, Statistical Office). New York, 1958- . Annual.

Official data for over 100 countries and territories, from 1950, where available. International tables showing data on principal aggregates and their interrelationships, gross national products and expenditures. 1964 edition includes for the first time world and regional index numbers of real gross domestic product by industrial origin. Introductory material explains the conceptual framework in deinging aggregates and systems of national accounts, and definitions of the items in standard tables.

Special Reference Works

Q-25 Cross-Reference Between National Commodity Nomenclatures and the Standard International Trade Classification. Organization for Economic Cooperation and Development. New York, United Nations Statistical Office. 1961.

Q-26 The Growth of World Industry, 1938-1961: National Tables. United Nations, Statistical Office. New York, United Nations, 1965.

Internationally comparable data presented for almost 100 countries or territories, on the industrial sector (mining, manufacturing, construction, electricity and gas industries). Statistics include the role of the sector in the economy of the area and measure the output resulting from and the key resources employed in industrial activities. An introductory article is written for each country or territory. The publication is an extension of the earlier Patterns of Industrial Growth, 1938-1958, also prepared by the United Nations.

Q-27 Indexes to the International Standard Industrial Classification of All Economic Activities. United Nations, Statistical Office. New York, United Nations, 1959.

Statistical Papers, Series M.

Q-28 International Equipment Directory. (International Equipment Directory Inc.). New York, 1961- . Monthly.

Published every other month in English for Europe, Africa, Middle and Far East, and the Pacific area. The Directorio Internacional de Equipos is published in Spanish in alternate months, for Latin America, Portugal and Spain.

Q-29 World Economic Agencies; Law and Practice. Charles Henry Alexandrowicz. New York, Praeger, 1962.

Discusses the history, organization, legal developments, and functioning of major world agencies, including the Universal Postal Union, the International Telecommunication Union, the International Labor Organization, the Food and Agriculture Organization, the World Health Organization, the International Civil Aviation Organization, the International Maritime Consultative Organization, the International Monetary Fund and International Bank for Reconstruction and Development, the General Agreement on Tariffs and Trade, international commodity organizations, and the Economic and Social Council of the United Nations.

Regional

Q-30 Economic Developments in Africa. (United Nations, Statistical Office). New York, 1949/50- . Annual

Issued as a supplement to the World Economic Survey. The publication has recently been taken over by the Economic Commission for Africa.

Q-31 Economic Developments in the Middle East. (United Nations, Statistical Office). New York, 1949/50- . Annual.

Also issued as a supplement to the Survey.

Q-32 Economic Survey of Asia and the Far East. (United Nations, Economic Commission for Asia and the Far East). Bangkok, 1947- . Annual.

Supplemented by the Economic Bulletin for Asia and the Far East (from 1950, quarterly from 1953).

Q-33 Economic Survey of Latin America. United Nations, Economic Commission for Latin America. Baltimore, Maryland, Johns Hopkins Press for the Pan American Union, 1962.

See also the Economic Bulletin for Latin America (Santiago, Chile, from 1956) and the Statistical Bulletin for Latin America (from 1964).

SECTION R

AGRICULTURAL ECONOMICS

General

R-1 Agricultural Economics Research. (United States Department of Agriculture, Economic Research Service). Washington, D. C., 1949- . Quarterly.

Contains technical articles dealing with methods, results, and finding of research in agricultural economics, research, marketing.

R-2 American Journal of Agricultural Economics. (American Agricultural Economics Society). Lancaster, Pa., 1919- . Monthly.

The major journal in the field.

Title was Journal of Farm Economics from 1919-April, 1968.

R-3 Checklist of Publications Issued by the Economic Research Service and the Statistical Reporting Service. (United States Department of Agriculture). Washington, D. C., 1961- . Monthly.

Supercedes Checklist of Publications Issued by the Agricultural Marketing Service (bi-monthly, 1953-1961).

R-4 Commodity Policy Studies. (Food and Agriculture Organization of the United Nations). Rome, 1952- . Irregular.

A monograph series containing research and reference materials on problems of commodity trade and agricultural development.

R-5 Commodity Series and Commodity Reports. (Food and Agriculture Organization of the United Nations). Rome, various dates.

Brief publications on specific commodities.

R-6 Digest of Agricultural Economics and Marketing. (Institute for Research in Agricultural Economics, University of Oxford). Oxford, England, 1957-1965. Quarterly.

Includes abstracts, bibliographies, book reviews, and statistics.

R-7 FAO Community Review. (Food and Agriculture Organization of the United Nations). Rome, 1961- . Annual

Summarizes developments in international commodity markets, providing a detailed analysis of both situation and outlook for all major agricultral commodities, including forest products and fisheries. Data on production, consumption, trade, stocks, and prices of individual commodities. Mimeo.

Special supplements in 1962: Agricultural Commodities: Projections for 1970; and 1964: Trade in the United Nations Development Decade.

R-8 FAO Marketing Guides. (Food and Agriculture Organization of the United Nations). Rome, various dates. irregular.

Five separate titles.

R-9 Foreign Agricultural Economic Reports. (United States Department of Agriculture, Economic Research Service). Washington, D. C., 1961- . Irregular.

A series of research and reference monographs on problems of international agriculture.

R-10 Revue Internationale des Industries Agricoles. (Centre de Documentation, Commission Internationale des Industries Agricoles). Paris, 1937- . Monthly.

Part 1: Revue des Periodiques; Part 2: Revue des Livres.

R-11 Summaries of Studies in Agricultural Education. American Vocational Association, Agricultural Research Committee. Washington, D. C., United States Department of Agriculture. 1965.

Annotated bibliography of studies in agricultural education with a classified subject index.

Voc. Div. Bulletin 180, supplement 16, Agriculture Series 80.

R-12 World Agricultural Economics and Rural Sociology Abstracts. (For the International Association of Agricultural Economists by the International Association of Librarians and Documentalists). Amsterdam, North Holland Publishing Co. 1959- . Quarterly.

Covers important journals, reports of institutes and other organizations, and material acquired through personal contacts in various countries. All titles are translated; when an entire article has been translated, the translator is indicated.

Statistical Data and Inventories

R-13 Agricultural Credit and Related Data. (American Bankers Association, Agriculture Committee). New York, 1949- . Annual.

Discusses current developments and findings in the various phases of agricultural finance. Signed articles by research specialists or officials of operating agencies and brief news items cover important developments in the changing financial situation of agriculture and in the financial institutions that serve agriculture. Research findings and analyses relate to such subjects as sources of capital used in agriculture, farm-mortgage credit, non-real estate credit, financing of specialized activities such as purchase of machinery, storage of commodities, agricultural risk and insurance, farm bankruptcies, farm real estate volume and transfers, taxation of farms and of farmers, and the interrelations of agriculture and public finance at local, state, and national levels. A statistical appendix contains detailed data by states and by geographic divisions. Also included are a list of current research activities in agricultural finance as reported by Federal and State agencies and reviews of pertinent books. --Catalog

R-14 Agricultural Outlook Charts. (United States Department of Agriculture, Economic Research Service). Washington, D. C., 1928- . Annual.

Annual issues of the monthly two-page publication, Agricultural Outlook Digest.

R-15 Agricultural Prices. (United States Department of Agriculture, Statistical Reporting Service). Washington, D. C., 1951- . Monthly, with annual summary.

R-16 The Balance Sheet of Agriculture. (United States Department of Agriculture, Economic Research Service). Washington, D. C., 1945. Annual.

R-17 Foreign Agricultural Trade of the United States. (United States Department of Agriculture, Economic Research Service). Washington, D. C., 1955- . Monthly.

An analytical review emphasizing current status and outlook for trade, including Food for Peace shipments. Regularly summarizes cumulative data on quantity and value from July 1 of current year with comparisons for the corresponding period of the previous year; cumulated country totals from July 1 of current year only. Government program information consists of quantity and value totals for individual countries and commodities as available. Frequent articles of special interest to importers and exporters. Once a year includes fiscal data on imports of fruits and vegetables under quarantine. -- Catalog. Annual commodity and country supplement, by fiscal and calendar years.

R-18 Foreign Agriculture. (United States Department of Agriculture, Foreign Agriculture Service). Washington, D. C., 1963- . Weekly.

Title prior to 1969 was Foreign Agriculture--Including Foreign Crops and Markets.

Presents news of world agriculture trade, especially as it affects U. S. agriculture, reports on current crop and livestock developments abroad, foreign trends in production, policies, prices, supplies and consumption of farm products and other factors affecting world demand for the products of U. S. agriculture. Also reports on U. S. policies and programs to expand agricultural exports. --Catalog

R-19 Monthly Bulletin of Agricultural Economics and Statistics. (Food and Agriculture Organization of the United Nations). Rome, May, 1952- . Monthly.

Continuation of Monthly Bulletin of Food and Agricultural Statistics. (1948-May, 1952).

R-20 Prices of Agricultural Products and Fertilizers. (United Nations, Economic Commission for Europe). Geneva, 1950/51- . Annual.

R-21 Quantity Indexes of U. S. Agricultural Exports and Imports. United States Department of Agriculture, Foreign Agricultural Service. Washington, D. C., 1962.

Revised January, 1960.

FAS-M-76.

R-22 Statistical Bulletins. (United States Department of Agriculture, Agricultural Research Service). Washington, D. C., Statistical Reporting Service, various dates. Irregular.

In addition to those already mentioned, see No. 273, Index Numbers of Agricultural Production, by Regions, 1939-1958 (1960); No. 233, Changes in Farm Production and Efficiency (annual).

R-23 Trade Yearbook. (Food and Agriculture Organization of the United Nations). Rome, 1957- . Annual

Export and import data for over 100 agricultural commodities, by country. No cross-tabulation between exporter and importer. Includes notes on currency exchange rates and on peculiarities of the statistics shown for each country and commodity.

R-24 World Agricultural Production and Trade, Statistical Report. (United States Department of Agriculture, Foreign Agricultural Service). Washington, D. C., 1957- . Monthly.

Replaces World Summaries of Crops and Livestock.

Special Reference Works

R-25 Capital in Agriculture: Its Formation and Financing Since 1870. Alvin S. Tostlebe. New York, National Bureau of Economic Research, 1957.

Studies in Capital Formation and Financing 2.

R-26 Technical Conversion Factors for Agricultural Commodities. Food and Agriculture Organization of the United Nations. Rome, United Nations, 1960.

Commodity Data; Food

Abstracts and Guides to Research

R-27 FAO Food Additives Control Series. (Food and Agriculture Organization of the United Nations). Rome, 1957- . Irregular.

R-28 Oleagineux; revue generale des corps gras et derives. (Institut de Recherches pour les huiles et oleagineaux). Paris, 1946- . Monthly.

Includes abstracts, book reviews, charts, illustrations, market statistics, etc.

R-29 Sugar Industry Abstracts. (Sugar Refiners' Association and British Sugar Corporation). England, 1938- . Monthly.

R-30 Zeitschrift fur die Zucherindustrie. (Fachorgan fur Technik, Ruberbau und Wirtschaft). Berlin, 1951- . Monthly.

Summaries in English and French. Includes abstracts, advertising, bibliographies, book reviews, charts and illustrations, market and patent statistics, trade literature.

Statistical Data and Inventories

R-31 Annual Coffee Statistics. (Pan American Coffee Bureau). New York, 1958- . Annual

World coverage, noting major developments in International Coffee Organization activities, price movements, world production and trade, major markets.etc.

R-32 Coconut Situation. (Food and Agriculture Organization of the United Nations). Rome, 1959- . Biennial.

R-33 Cocoa Statistics. (Food and Agriculture Organization of the United Nations). Rome, 1958- . Quarterly.

R-34 Milk Production and Dairy Products. (United States Department of Agriculture, Statistical Reporting Service). Washington, D. C., 1962- . Monthly and annual.

R-35 Revue Internationale de la Chocolaterie. (Max Glatti). Zurich, Switzerland, 1946- . Monthly.

Trilingual. Includes abstracts, advertising, bibliographies, book reviews, charts, illustrations, market statistics, and index.

R-36 World Grain Trade Statistics. (Food and Agriculture Organization of the United Nations). Rome, 1954/55- . Annual

Formerly Exports by Source and Destination (1949/50-1953/54).

The 1963/64 edition includes tables detailing trading activities of the U.S.S.R., Eastern Europe, and China, with historical series for the former two (1955-63 and 1953-63 respectively). Part IV shows trading in all types of grains (except rice) for the eleven-year period 1953/54 to 1963/64 and pre-war 1934/35 to 1938/39.

Special References

R-37 National Grain Policies. Food and Agriculture Organization of the United Nations. Rome, United Nations, 1959.

Statements of 21 different countries on national policies and measures affecting grains in each of them. Yearly supplements.

Commodity Data: Commercial Fisheries

Guides to Research and Statistics

R-38 Census of Commercial Fisheries. United States Department of Commerce, Bureau of the Census. Washington, D. C., Department of Commerce, 1963.

R-39 Commercial Fisheries Abstracts. (United States Department of the Interior, Fish and Wildlife Service). Seattle, Washington, 1948- . Monthly.

An index to material from some 90 journals (A list of those abstracted occurs in alternate issues.) on all aspects of commercial fisheries except biology.

R-40 Commercial Fisheries Review. (United States Department of the Interior, Fish and Wildlife Service). Seattle, Washington, 1939- . Monthly.

Technical articles and news on fishery industries--production, marketing, statistics, orders, announcement of government action.

R-41 Current Fishery Statistics Bulletins. (United States Department of the Interior, Fish and Wildlike Service). Washington, D. C., various dates. Monthly and annual.

R-42 FAO Fisheries Studies. (Food and Agriculture Organization of the United Nations). Rome, various dates. Irregular.

Research monographies.

R-43 Fisheries of the United States. (United States Department of the Interior, Fish and Wildlife Service). Washington, D. C.,

R-44 General Fisheries Council for the Mediterranean, Proceedings and Technical Papers. (Food and Agriculture Organization of the United Nations). Rome, 1952- . Biennial.

R-45 Propagation and Distribution of Food Fishes. (United States Department of the Interior, Fish and Wildlife Service). Washington, D. C., 1943- . Biennial.

A statistical digest.

R-46 Yearbook of Fishery Statistics. (Food and Agriculture Organization of the United Nations). Rome, 1947- . Annual.

Contains statistical data on production and foreign trade in fisheries products and in products derived from related industries, including tables that show imports and exports in terms of standardized statistical groupings of fishery commodities. There are also statistics on world catches and landings, utilization and production of preserved and processed fishery commodities, and composition of fishing fleets.

Special References

R-47 Fish as Food. Georg Borgstrom, editor. New York, Academic Press, 1962.

Vol. 1: Production, Biochemistry and Microbiology; Vol. 2: Nutrition, Sanitation, Utilization.

Includes a bibliography of 2,500 titles.

Commodity Data: Forest Products

Bibliographies and Guides to Research

R-48 Abstract Bulletin of the Institute of Paper Chemistry. (The Institute of Paper Chemistry). Appleton, Wis., 1930- . Monthly.

Includes detailed, well-written abstracts pertaining to the teoretical principles, technologies, products and trade practices of the pulp-, paper-, and board-manufacturing and paper-utilizing industries and their raw-material suppliers. --Explanatory Remarks. Covers periodical articles, dissertations, books, pamphlets and patents. A list of the periodicals from which abstracts are taken was published in the September, 1963 issue. Individual issues have an author, patent number and subject index plus a list of recent translations from the foreign technical literature. Indices are cumulated annually. --Bookmark

R-49 Bibliography of Forestry and Forest Products. (Food and Agriculture Organization of the United Nations). Rome, 1949-1952. Monthly.

R-50 Bibliography of Papermaking and U. S. Patents. (Technical Association of the Pulp and Paper Industry). New York, 1900- . Irregular.

Issued to date: 1900-1928; 1928-1935; 1936-1945; 1946-1950; 1951-1955; 1956- . Annual volumes, 1936- .

Covers literature on all phases of pulp and paper manufacture, from the growing of trees to printing and water marks, from adhesives to yankee machines. Arranged by subject, including forestry, wood, papermaking materials, lignin, machinery, woods operations, cellulose and cellulose derivatives.

R-51 Economics of Forestry, 1940-1947. United States Department of Agriculture, National Agricultural Library. Washington, D. C., 1950.

Library List No. 52.

Two supplements to this original list have been issued. The first, covering the period 1948-1952, was published as Library List No. 52, Supplement 1, in 1955, and the second as Library List No. 52, Supplement 2, in 1959.

Covers English language publications on the economics of forestry from the United States and Canada, including value and price aspects of (1) forest and forest-land use and tenure; (2) forest management; (3) industry based directly on forest products; (4) marketing of forest products; and (5) consumption of forest products. --Foreword

R-52 FAO Forestry and Forest Products Studies. (Food and Agriculture Organization of the United Nations). Rome, 1950- . Various dates.

Composite source.

R-53 Index of Selected Journal Articles Pertaining to the Forest Products Industries. W. I. West. School of Forestry, Oregon State University. 1957, 1961, 1963.

An index to selected articles in The Timberman, The Lumberman, Wood and Wood Products, Forest Products Journal, Journal of Forestry and the Southern Lumberman. Based on a reference index used in some of the courses in the School of Forestry at the University. Areas covered include costs, fire protection, lumber grading, mill descriptions and layouts, mill equipment, production practices, selling, safety seasoning, etc.

R-54 List of Publications. (United States Department of Agriculture, Forest Service; Forest Products Laboratories). Madison, Wisconsin, 1947- . Irregular.

R-55 Wood Machining Abstracts. (Forest Products Research Society). Stamford Connecticut. 1957/58- . Annual.

WMA reviews the most important references which contain information concerning the machining of wood and wood-based materials. It is not intended that this work duplicate the services provided by other abstracts such as Forestry Abstracts; Dissertation Abstracts; etc. In fact, the information reported herein has been obtained from the original sources with the exception of a listing of available translations from C.S.I.R. Abstracts (See above, Section C). A list of references from which the abstracts are taken is given in the front of each issue.--Bookmark

Statistical Series

R-56 Demand and Price Situation for Forest Products. (United States Department of Agriculture, Forest Service). Washington, D. C., 1963- . Annual

R-57 Forest Economics and Statistics. (Food and Agriculture Organization of the United Nations). Rome, 1958- . Irregular.

See: World Forest Products Statistics, 1946-1955: A 10-year Summary (1958).

R-58 Latin American Timber Trends and Prospects. United Nations, Economic Commission for Latin America. New York, 1963.

R-59 Naval Stores. (United States Department of Agriculture, Crop Reporting Board). Washington, D. C., 1952- . Monthly and annually.

R-60 Pulp, Paper and Board. (United States Department of Commerce, Business and Defense Services Administration). Washington, D. C., 1950- . Quarterly.

R-61 Timber Bulletin. United Nations, Economic Commission for Europe. Geneva, 1955- . Quarterly.

Formerly Timber Statistics for Europe, 1948-54. Quarterly.

See also: European Timber Statistics, 1933-1950 (United Nations, Economic Commission for Europe, Geneva, 1952). Both prepared in cooperation with the Food and Agriculture Organization.

R-62 Yearbook of Paper Products Statistics. (Food and Agriculture Organization of the United Nations). Rome, 1947- . Annual.

Data on more than 100 countries during the two years preceeding publication. Tables deal with production, trade and consumption in roundwood, sawnwood, and fibre board. Includes articles on salient features of the current world forest production situation.

Special References

R-63 The Dictionary of Paper, 2nd Edition. American Paper and Pulp Association. New York, 1951.

R-64 The Papermakers' and Merchants' Directory of the World. (S. C. Phillips and Co., Ltd.). London, . Annual.

Commodity Data: Textiles

Abstracts and Guides to Research

R-65 The Journal of the Textile Institute. (Textile Institute). Manchester, England, 1910- . Monthly

Issued in three parts: Abstracts; Proceedings; Transaction.

R-66 Natural and Synthetic Fibers. (Information for Industry, Inc.). Washington, D. C., 1945- . Monthly.

Includes abstracts, charts, illustrations. In looseleaf format. The corporation also acts as a literature service.

R-67 Textile Technology Digest. (Institute of Textile Technology). Charlottebille, Virginia, 1944- . Monthly.

Includes abstracts, patent information, indexes.

Statistical Information

R-68 Cotton Production and Distribution. (United States Department of Commerce, Bureau of the Census). Washington, D. C., 1905- . Annual.

R-69 International Cotton Bulletin. (International Federation of Cotton and Allied Textile Industries). Manchester, England, 1922- . Quarterly.

Special References

R-70 Modern Textile Magazine. (American Association for Textile Technology). New York, 1925- . Monthly.

The reports of the annual conferences of the association, held since 1961, are printed in special editions of the Magazine.

R-71 The Textile Industry in Latin America. United Nations, Economic Commission for Latin America. New York, 1963.

Farms and Crops (Domestic)

R-72 Changes in Farm Production and Efficiency: Summary Report. (United States Department of Agriculture, Conomic Research Service). Washington, D. C., 1953- . Annual.

Statistical Bulletin No 233.

R-73 Costs and Returns on Commercial Farms; Long-Term Study, 1930-1957. (United States Department of Agriculture, Economic Research Service). Washington, D. C., 1961.

Statistical Bulletin No. 197. Supplemented by Farm Costs and Returns: Commercial Farms by Type, Size and Location(annual). Agricultural Information Bulletin No. 230.

R-74 Crop and Livestock Reports. (United States Department of Agriculture, Statistical Reporting Service). Washington, D. C., monthly, quarterly, annual. Various dates.

Composite source.

Farm production and disposition of principal crops, meat animals, milk, chicken, eggs, turkeys, etc.

R-75 Crop Production. (United States Department of Agriculture, Crop Reporting Board). Washington, D. C., 1946- . Sixteen times a year.

Acerage, yield and production, by states.

R-76 Crop Values; Season Average Prices Recieved by Farmers and Value of Production by States. (United States Department of Agriculture, Crop Reporting Board). Washington, D. C., 1957- . Annual.

R-77 Farm Index. (United States Department of Agriculture, Economic Research Service). Washington, D. C., 1962- . Monthly.

Reports in non-technical language the results of the research program of the ERS. Material is grouped according to special interests of farming, marketing, the foreign market, and the consumer.

R-78 Farm Population, Estimates for 1910-1962. United States Department of Agriculture, Economic Research Service. Washington, D. C., 1963

ERS-130.

R-79 Federal Reclamation Projects; Crop Report and Related Data. (United States Department of the Interior, Bureau of Reclamation). Washington, D. C., 1953- . Annual.

Lands and Land Use

R-80 Bibliography of Land and Water Utilization and Conservation in Europe. C. H. Edleman and B. E. P. Eeuwens. Wageningen, Netherlands, Food and Agriculture Organization of the United Nations. 1955.

Not annotated; includes references to surveys, maps, dissertations, articles, books, etc.

R-81 Bibliography on Land Tenure. (Food and Agriculture Organization of the United Nations). Rome, 1955.

First published in 1955, with the help of the United Nations; the United Nations Educational, Scientific and Cultural Organization; and the International Labor Organization. Supplement in 1959. Includes works from practically every European language and some Asian languages, translated into English, French, and Spanish. The selections fall into three main categories: general background information, special studies in the field of land tenure, and legislation pertaining to land tenure and related subjects.

R-82 The Closing of the Public Domain: Disposal and Reservation Policies 1900-1950. E. Louise Pfeffer. Stanford, California, Stanford University Press, 1951.

R-83 Government Land Acquistion: A Summary of Land Acquistion by Federal, State and Local Governments up to 1964. American Forest Products Industries in cooperation with the Ohio Forest Industry Committee, Washington, D. C., 1964.

R-84 Major Uses of Land and Water in the United States. United States Department of Agriculture, Economic Research Service. Washington, D. C., 1962

Agricultureal Economics Report No. 13.

R-85 Public Lands Bibliography. (United States Department of the Interior, Bureau of Land Management). Washington, D. C., 1953.

Contains most of the known writing on public lands activities, programs and legislation previou to 1954. The publication will be brought up to date and maintained on a current basis through publication of supplements. --Preface. Includes laws and legislation as well as articles and monographs. Supplement 1: 1954-1962.

R-86 Public Lands Bibliography Supplement II. United States Department of the Interior, Reference Section. Washington, D. C., 1967.

Covers material published from 1965 thru October 1967. Arranged in one alphabet except for Laws and Legislation. 457 entries.

R-87 Public Lands Statistics. (United States Department of the Interior, Bureau of Land Management). Washington, D. C., 1962- . Annual.

Concerning Federal operations only. Statistics relate to: the Federal lands (a historical series); outdoor recreation, minerals, legal problems, public land surveys, forest management, range management, fire and tresspass protection, administration, finance personnel.

R-88 Urban Land; news and trends in city development. (Urban Land Institute). Washington, D. C., 1941- . Eleven times a years.

Statistical information and index to literature. Available to students, faculty, academic and city libraries.

R-89 Urbanization and Changing Land Use: A Bibliography of Selected References, 1950-1958. Elizabeth Gould Davis and Hugh A. Johnson and Claude C. Harne. Washington, D. C., United States Department of Agriculture, 1960.

Miscellaneous Publ. 825.

R-90 Zoning Digest. (American Society of Planning Officials). Chicago, Illinois, 1949- . Monthly.

Cumulative index every five years.

SECTION S

MINING AND MANUFACTURING

Data on mineral and material usage will be found with information concerning its major users: construction and transportation manufacturers, producer and consumer durables manufacturers, containers manufacturers. A major problem in interpreting the data available is that measurements are taken at varying times and forms of consumption. Apparent consumption may well differ from figures of surveyed and reported consumption.

References below are mainly on domestic manufacturing, except for reports on specific materials commodities in international economic activity by study groups and trade and production associations. See Sections Q, "Economic and Financial Indicators," and N, "Mineral and Energy Resources" for further information.

General Industrial Information

S-1 Annual Survey of Manufactures. (United States Department of Commerce, Bureau of the Census). Washington, D. C., 1949/50- . Annual

S-2 Census of Business. (United States Department of Commerce, Bureau of the Census). Washington, D. C., 1810, 1830-1900, Decennial; 1904-1919, Quinquennial; 1921-1939, Biennial; 1947, 1958, 1963. Irregular.

See also: Historical Comparability of Census of Manufactures Industries, 1929-1958 (1959), Working Paper No. 9.

S-3 Census of Mineral Industries. (United States Department of Commerce, Bureau of the Census). Washington, D. C., 1840-80, Decennial; 1889; 1902; 1909-1939. Decennial; 1954; 1958; 1963; Irregular.

S-4 Information Circulars. (United States Department of the Interior. Bureau of Mines). Washington, D. C., 1925- . Irregular.

Reports on accidents, industry and commodity developments.

S-5 Metallic and Industrial Mineral Deposits. Carl A. Lamey. New York. McGraw-Hill, 1966.

Deals with the characteristics and origin of mineral deposits in general, the specific mineral deposits, and specific industrial deposits of the world.

S-6 Mineral Industry Survey. (United States Department of the Interior. Bureau of Mines). Washington, D. C., 1933- . Various dates.

Series of releases giving statistical data on various commodities. Weekly, monthly, and quarterly reports are usually replaced by annual data in the Minerals Yearbook issued about two years after date of the data.

S-7 Mining Guide. Industrial Atlas Corporation. New York, 1967.

Prepared as a supplement to the Mining Map, which it accompanies, this book describes the major mines of the United States, giving names and address of operators, principle product, and mine type.

Commodity Information

S-8 Aluminum Factbook. United States Department of Commerce. Business and Defense Services Administration. Washington, D. C., 1963.

Tables include: a world summary of production, consumption and capacity; the United States industry, including supply sources; and world trade of aluminum for each country by destination. The period covered in the series varies.

The study is one of a series of long-range industrial growth studies planned by the BDSA in cooperation with the various industries.

S-9 Annual Statistical Report. (American Iron and Steel Institute). New York, 1851- . Annual.

Information on practically every phase of domestic operations in the utilization of these commodities.

S-10 Bulletin of Steel Statistics for Europe. (United Nations, Economic Commission for Europe). Geneva, 1950- . Quarterly.

S-11 Bulletin Statistique; charbon et acier. (European Coal and Steel Community High Authority). Luxembourg, Belgium, 1953-1961- . Quarterly.

This title has been superceded by European Communities. Statistical Office. Eisen und Stahl. 1953-1955 issued monthly.

S-12 Commodity Data Summaries. (United States Department of the Interior, Bureau of Mines). Washington, D. C., 1965- . Annual.

Composite source.

S-13 Copper Industry Report. (United States Department of Commerce, Business and Defense Services Administration). Washington, D. C., 1954- . Quarterly.

Brief textual and statistical summary of major developments affecting supply and demand domestically. Occasionally includes a feature on foreign situations.

S-14 Iron and Steel Monthly Statistics. (British Iron and Steel Federation). London, 1956- . Monthly.

Formerly: Statistical Bulletin. (National Federation of Iron and Steel Manufacturers. London). 1920-1934. Statistical Bulletin. (British Iron and Steel Federation). 1935-1939. Monthly Statistical Bulletin. (British Iron and Steel Federation). 1946-1955.

Cumulated annually as: Iron and Steel Annual Statistics for the United Kingdom.

S-15 Metal Statistics. (American Metal Market). New York, 1908- . Annual.

S-16 Mineral Trade Notes. (United States Department of the Interior. Bureau of Mines). Washington, D. C., 1935- . Monthly.

S-17 Monthly Bulletin of Statistics; Bulletin Mensuel de Statistique. (International Lead and Zinc Study Group). New York, 1961- . Monthly.

Title varies: Statistiques du Plomb et du Zinc.

S-18 Monthly Statistics. (American Iron Ore Association). Cleveland, Ohio - . Monthly.

S-19 Review of Zinc in the United States. (American Zinc Institute, Inc.). New York, 1967- . Annual.

Supercedes Review of the Zinc Industry in the United States.

The Unstitute is the national trade association of the industry.

S-20 Statistical Report. (Japan Iron and Steel Federation). Tokyo, 1951/52 (?)- . Annual.

Formerly Statistical Yearbook.

S-21 Statistical Yearbook. (International Tin Council). The Hague, 1956- . Biennial.

Supercedes Statistical Year Book. (International Tin Study Group). 1949-1956.

S-22 Statistisches Jahrbuch. (Wirtschaftsvereinigung Eisen-und Stahlidustrie). Dusseldorf, 1953/54 (?)- . Annual.

S-23 World Non-Ferrous Metal Statistics. (British Bureau of Non-Ferrous Metals). London, 1948- . Monthly.

S-24 Year Book of the American Bureau of Metal Statistics. (America Bureau of Metal Statistics). New York, 1920- . Annual.

Special Reference Works

S-25 Capital in Manufacturing and Mining; Its Formation and Financing. Daniel Creamer, et. al. New York, National Bureau of Economic Research, 1960.

Studies in Capital Formation and Financing No. 6.

S-26 Directory of Iron and Steel Works of the U. S. and Canada. (America Iron and Steel Institute). New York, 1916- . Triennial.

S-27 Survey and Analysis of the Supply and Availability of Obsolete Iron and Steel Scrap. Battelle Memorial Institute for the United States Department of Commerce. Columbus, Ohio, 1957.

S-28 Three Studies in Minerals Economics. Orris C. Herfindahl. Washington, D. C., Resources for the Future. Inc., 1961.

A short study, including chapters on the meaning of conservation, long-run cost analysis of minerals, and United States trade policy.

SECTION T

CONSTRUCTION

There is an absence of historical data directly concerned with construction materials: for such information check Historical Statistics of the United States and reports such as Timber Resources in America's Future. New Housing and Its Materials, 1940-1956. Current domestic information may be found in many sources: Survey of Current Business, Census of Housing, publications of the Lumber Manufacturers' Association, Current Industrial Reports of the Bureau of the Census, the Minerals Yearbook, etc.

Abstracts and Special References

T-1 Building Science Abstracts. (British Department of Scientific and Industrial Research). London, 1938- . Monthly.

T-2 Community Facilities: A List of Selected References, 2nd edition. National Association of Home Builders, Community Facilities Committee, by the National Housing Center Library. Washington, D. C., 1959.

Bibliography Series No. 4.

A listing of books and articles on construction and community problems, including general metropolitan and facilities problems, governmental relations, planning and forecasting, schools, water distribution and sewerage systems, air and water pollution, streets and highways, transportation, recreation, zoning, garbages, shopping centers, relifious, cultural, and health facilities. Also includes references to legal aspects of above problems, with case citations and opinions. Author index.

T-3 The Handy-Whitman Index of Water Utility Construction Costs. Whitman, Requardt and Associates. Baltimore, 1958- . Semi-annually.

T-4 Housing and Planning References. (Department of Housing and Urban Development, Office of the Secretary). Washington, D. C., 1965- . Bimonthly.

Formerly published by the Housing and Home Finance Agency. New Series, No. 4.

Partially annotated index to publications of state and other Federal agencies, articles in journals and magazines, on a wide range of problems in planning fields. Arranged by subject; includes geographic index; index to Department publications and articles and speeches of Department officials.

Statistical Information

T-5 Census of Housing. (United States Department of Commerce, Bureau of the Census, Housing Division). Washington, D. C., 1940- . Decennial.

T-6 Construction Materials Statistics, 1947-1957. United States Department of Commerce, Business and Defense Services Administration). Washington, D. C., 1959.

T-7 Construction Review. (United States Department of Commerce, Business and Defense Administration). Washington, D. C., 1955- . Monthly.

Until 1959, published jointly by the Bureau of Labor Statistics and the BDSA, Supplement: Construction Volume and Costs.

T-8 Housing Statistics. (United States Department of Housing and Urban Affairs). Washington, D. C., 1948- . Monthly.

Fromerly under the United States Housing and Home Finance Agency.

T-9 New Housing and Its Materials, 1940-1956. United States Department of Labor, Bureau of Labor Statistics. Washington, D. C., 1958.

SECTION U

TRANSPORTATION

Transportation data are to be found both in governmental and trade association sources: For the former, check the Interstate Commerce Commission, Maritime Administration, Inland Waterways Commission (for historical data), Bureau of the Census: major names among the trade associations are the Automobile Manufacturers Association, American Transit Association, Association of American Railroads, American Railway Car Institute, and so forth.

International data are available primarily through UNESCO; transportation and communications data have been a prime concern of that organization for a number of years.

Abstracts and Research

U-1 Census of Transportation. United States Department of Commerce, Bureau of the Census. Washington, D. C., most recent, 1963.

U-2 Domestic Oceanborne and Great Lakes Commerce of the United States, 1962. (United States Maritime Administration). Washington, D. C., 1955-1962 (latest). Annual.

Statistics on dry cargo and tanker shipments moving in deep-sea ships of 1,000 gross tons and over. Data are presented by commodity tonnages from shipping area to receiving area and by total tonnages from shipping port to receiving port.

U-3 Essential United States Foreign Trade Routes. United States Maritime Administration. Washington, D. C., 1963.

Description of trade routes and services, together with the names of the United States flag lines that provide service thereon, principal commodities exported and imported by the United States on each route.

U-4 Highway Research Abstracts. (National Academy of Sciences-National Research Council). Washington, D. C., 1931- . Eleven issues annually.

This index covers a selected group of highway publications and is of more value as a current awareness device than for retrospective searching. Cumulative indices are available for vols. 1-31 and for each annual volume thereafter. Every year one issue is devoted to synopses of the papers and reports scheuled for presentation at the annual meeting of the Highway Research Board. Two additional current awareness indices for highway and transportation literature are available from the U. S. Bureau of Public Roads: Highways: Current Literature, a weekly, and Urban Transportation Research and Planning: Current Literature, a semi-monthly.

U-5 Highway Statistics. (United States Department of Commerce, Bureau of Public Roads). Washington, D. C., 1945- . Annual

U-6 Public Roads: A Journal of Highway Research. (United States Department of Commerce, Bureau of Public Roads). Washington, D. C., 1918- . Bimonthly.

U-7 Railroad Transportation--A Statistical Record, 1921-1957. (Association of American Railroad).

U-8 Road Abstracts. (British Department of Scientific and Industrial Research). London, 1934- . Monthly.

U-9 Transit Fact Book. (American Transit Association). New York, 1942- . Annual.

U-10 Transport Statistics in the United States. (United States Interstate Commerce Commission). Washington, D. C., 1954- . Annual.

In seven sections: Railroads, Their Lessors and Proprietary Companies: The Pullman Company; Railway Express Agency, Inc.; Electric Railways: Carriers by Water; Oil Pipe Lines; Motor Carriers; Freight Forwarders: Private Car Lines.

SECTION V

ENERGY PRODUCTION

Abstracts and Bibliographies

V-1 The Coal Industry in America: a bibliography and guide to studies. Robert F. Munn, Morgantown, West Virginia University Library, 1965.

V-2 Nuclear Power Economics, A Bibliography. International Atomic Energy Association. Vienna, Austria, 1964.

Bibliographic Series No. 13. Foreword in English, French, Russian, Spanish.

Other material on atomic energy, from the IAEA and other organizations will be found in the section of this bibliography dealing with nuclear engineering.

V-3 Power Express. (International Physical Index, Inc.). New York, 1961- . Ten numbers to a volume.

A new comprehensive digest of current Russian literature dealing with power topics. Text in English. Includes abstracts, charts and illustrations, index.

Statistical Series

V-4 Annual Bulletin of Electric Energy Statistics for Europe. (United Nations, Economic Commission for Europe). Geneva, 1956- . Annual.

V-5 Annual Bulletin of Gas Statistics for Europe. (United Nations, Economic Commission for Europe). Geneva, 1955- . Annual.

V-6 Annual Report. (United States Atomic Energy Commission). Oak Ridge, Tennessee, 1959- . Annual

For data prior to 1959 see Semi-Annual Report, 1946-1959.

V-7 Annual Statistical Report--Rural Electrification Borrowers. (United States Department of Agriculture, Rural Electrification Administration). Washington, D. C., 1949- . Annual.

V-8 Bituminous Coal Facts. (National Coal Association). Washington, D. C., 1948- . Biennial.

V-9 The Coal Situation in Europe and Its Future Prospects. (United Nations, Economic Commission for Europe). Geneva, 1958/59- . Annual
Vol. for 1960/61 not published.

V-10 Edison Electric Institute Bulletin. (Edison Electric Institute). New York, 1933- . Monthly.

V-11 Electric Power in Asia and the Far East. (United Nations, Economic Commission for Asia and the Far East). New York, 1951/56- . Annual.

V-12 Electric Power Statistics. (United States Federal Power Commission). Washington, D. C., 1961- . Monthly.

Production of Energy and Capacity of Plants, Fuel Consumption of Electric Power Plants, Electric Utility System Loads, Sales of Electric Energy, Financial Statistics of Private Utilities.

V-13 Energy in Latin America. (United Nations, Economic Commission for Latin America). Santiago, Chile, 1963- . Annual.

V-14 Gas Facts; a statistical record of the gas utility industry in the U.S. (American Gas Association). New York, 1945/46- . Annual.

See also: Quarterly Report of the Gas Industry Operations.

V-15 The Gas Situation in Europe and its Future Prospects. (United Nations, Economic Commission for Europe). Geneva, 1961- . Annual.

V-16 Historical Statistics of the Gas Industry. American Gas Association. New York, 1956.

V-17 Hydroelectric Plant Construction Cost and Annual Production Expenses. 1953-56. United States Federal Power Commission. Washington, D. C., 1958.

Annual Supplement.

V-18 International Coal Trade. (United States Department of the Interior, Bureau of Mines). Washington, D. C., 1931- . Monthly.

V-19 International Petroleum Quarterly. (United States Department of the Interior, Bureau of Mines). Washington, D. C., 1964-1966. Ceased.

V-20 Petroleum Facts and Figures. (American Petroleum Institute). New York, 1928, 1929- . Published biennially.

Detailed figures attempt to describe the entire domestic industry. The 1963 edition includes data from 1958-62. Included are production, refining, transportation, marketing and utilization, prices and taxation. Meagre information on labor, finance, international activity.

V-21 Retail Prices and Indexes of Fuels and Electricity. (United States Department of Labor, Bureau of Labor Statistics). Washington, D. C., January, 1913-December, 1959. Monthly.

V-22 Rural Electrification. (United Nations, Economic Commission for Europe). Geneva, 1956- . Annual.

V-23 Rural Electrification Report. (United Nations, Economic Commission for Asia and the Far East). New York, 1962- . Annual.

V-24 Sales by Producers of Natural Gas to Natural Gas Pipeline Companies. (U. S. Federal Power Commission). Washington, D.C., - . Monthly.

Composite Report of average prices paid and received for natural gas, imports, purchases, production, storage, sales and major revenue, expense and balance sheet items, by major pipelines carrying about 91 per cent of gas subject to Commission jurisdiction. A companion volume to Statistics of Interstate Natural Gas Pipeline Companies. Issued in the form of a Commission press release.

V-25 Statistical Yearbook of the Electric Utility Industry for the Year. Edison Electric Institute. Easton, Pa., 1932- . Annual.

V-26 Statistical Yearbook of the World Power Conference. (International Executive Council). London, 1936- . Annual (irregular).

The aim of the 59 country-member conference is to consider potential resources and all the means of production of energy in all aspects, collect and publish data on energy resources and their utilization, hold conferences. They work with the International Commission on Large Dams, established by the World Power Conference, and are the founding organizational member of the Union of International Engineering Organizations.

V-27 Statistics for Interstate Natural Gas Pipeline Companies. (United States Federal Power Commission). Washington, D. C., 1963- . Annual.

Formerly Statistics of Natural Gas Companies, 1942-1962.

V-28 Statistics of Electric Utilities, Privately Owned. (United States Federal Power Commission). Washington, D. C., 1941- . Annual.

V-29 Statistics of Electric Utilities, Publicly Owned. (United States Federal Power Commission). Washington, D. C., 1948- . Annual.

V-30 Steam-Electric Plant Construction Cost and Annual Production Expenses, 1938-1947. (United States Department of the Interior, Federal Power Commission). Washington, D. C., 1948.

Annual Supplements begin in 1949.

V-31 Steam-Electric Plant Factors. (National Coal Association). Washington, D. C., 1950- . Annual.

V-32 Survey of Residential Gas Service by County--1964. American Gas Association. New York, 1965.

V-33 World Energy Supplies. (United Nations, Statistical Office). New York, 1953- . Annual.

Each volume covers a four-year period. All measures are in metric units; comparisons among fuels are made in metric tons of coal equivalent on the basis of heat energy obtained under ideal conditions. Includes data on production, trade and consumption of energy and energy fuel (coal, lignite, coke, petroleum and its products, natural and manufactured gas, electricity) by world totals, regions, and individual countries.

V-34 World Petroleum Report: An Annual Review of International Oil Operations. Mona-Palmer Publishing Co. New York, 1955- . Annual.

Articles on general developments in technology, news, and development politics, as well as on specific oil-producing countries. Includes tables, charts, concession maps, etc.

Special References

V-35 Basic Statistics of Energy, 1952-1963. Organization for European Economic Cooperation. Paris, 1965.

Includes tables on sources, production, trade, and consumption of energy for member countries. It both analyzes products by membership and groupings and products by year.

V-36 Energy in the American Economy, 1850-1975. Sam H. Schurr, Bruce C. Netschert, Vera F. Eliasberg, Joseph Lerner and Hans H. Landsberg. Baltimore, Johns Hopkins Press for Resources for the Future, Inc., 1960

V-37 Hydroelectric Power Resources of the United States, Developed and Undeveloped. United States Federal Power Commission. Washington, D. C., 1964.

V-38 McGraw-Hill Directory of Electric Utilities. New York, McGraw-Hill Publishing Co., 1891- . Annual.

V-39 Methods and Principles for Projecting Future Energy Requirements. United Nations, Economic Commission for Europe. New York, 1964.

Includes bibliography.

V-40 Methods of Calculating the Cost of Electric Power Produced by Thermal Power Stations. United Nations, Economic Commission for Europe. New York, 1963.

V-41 Nuclear Energy and the United States Fuel Economy, 1955-1980. Perry D. Teitlebaum. Washington, D. C., National Planning Association, 1958.

V-42 Problems in the Design and Operation of Thermal Power Stations, Vol.1 United Nations, Economic Commission for Europe. Geneva, 1965.

Deals with trends in general design and questions of corrosion of terminal heat exchange surfaces in power stations using liquid fuel containing sulpher.

V-43 World Crude Oil Production and Refining Capacity, 1963. Petroleum Institute Bureau. London, 1964.

Includes tables giving data for 1962 and 1963.

SECTION W

GOVERNMENT OPERATIONS

Policies and Finance

A 'general note' on sources of information on government operations will have to be limited. References below provide the major sources: it is worth noting, however, that much domestic information on resources research will be found in Senate and House Committees on Government Operations, Public Works, Appropriations, Agriculture, Interior and Insular Affairs, etc.; through the Natural Resources Committee of the Federal Council for Science and Technology; through the National Academy of Sciences--National Research Council. State and local agencies abound, each with its own reports and publications.

Lacking in the material to follow is information on defense procurement activities. Tabulations of defense requirements are found with the Defense Materials System (DMS), the peacetime successor to the Controlled Materials Plan (CMP) of World War II and the Korean War. The tabulations cover only prime contractors and subcontractors at the end of product stage. Magnesium, lead, zinc, and other important minerals are omitted from the lists. Requirements of the Atomic Energy Commission are withheld; however, their procurement needs are small relative to total defense needs. Supplementary data may be found in census data on ships and aircraft, Bureau of Mines publications, and reports of the Dow Chemical Company, Aerospace Industries Association (formerly Aircraft Industries Association), the American Ordnance Association, etc.

Domestic

W-1 Census of Governments. United States Department of Commerce, Bureau of the Census. Washington, D. C., 1962.

In seven volumes: I. Governmental Organization; II. Compendium of Public Employment; III. Government Finances; IV. Local Government in Metropolitan Areas; V. Topical Studies; VI and VII. State Reports.

W-2 Compendium of City Government Finances in [year]. (United States Department of Commerce, Bureau of the Census, Governments Division). Washington, D. C., 1934- . Annual.

W-3 Compendium of State Government Finances in [year]. (United States Department of Commerce, Bureau of the Census, Governments Division). Washington, D. C., 1961- . Annual.

W-4 County and City Data Book. (United States Department of Commerce, Bureau of the Census). Washington, D. C., 1952- . Irregular.

W-5 Metropolitan Communities, 1956. Government Affairs Foundation, Inc., and Bureau of Public Administration of the University of California (Berkeley). Chicago, Illinois, 1956.

Supplement published covering 1957-1959.

A basic bibliography on metropolitan communities, focusing on government and politics, but including material on socio-economic characteristics and the development of urban centers. Includes lists of journals, agencies, bibliographies, and other sources of current and historical data.

W-6 Municipal Yearbook. (International City Managers Association). Chicago, Illinois, 1934- . Annual.

A continuing reference for municipal officers, teachers, and students on current activities and practices of cities throughout the United States. Articles, statistics, bibliographies, personnel, and association directories are among the types of information presented.

W-7 Recent Publications on Governmental Problems. (Joint Reference Library). Chicago, 1931- . Weekly.

Lists by subject articles fed in by cooperating associations. Includes lists of periodicals indexed with each issue.

International

W-8 Annual Review of United Nations Affairs. Richard N. Swift, editor. New York, Oceana Publications by Arrangement with the New York University Press, 1949- . Annual.

Covers the "working year" of the United Nations, that is, June 16 to June 15. Contains articles by scholars and administrators on the major themes of the year. For specific information on the proceedings of the separate councils, see the Indexes to the Proceedings of . . . . The UN Monthly Chronicle (United Nations, Office of Public Information, New York, from 1964) reports on general debates, the work of specialized agencies and subcommittees, announces meetings, documents, and agenda. For summary data and articles, see the United Nations Yearbook.

W-9 Official Record of United States Foreign Policy. (United States Department of State). Washington, D. C., 1939- . Weekly.

W-10 Statesmans' Yearbook. St. Martins' Press, New York, 1864- . Annual.

Includes comparative statistical tables, history, and functions of international organizations (governmental and quasi-governmental). Basic data on the countries of the world with emphasis on the Commonwealth.

W-11 United Nations Documents Index. (United Nations). New York, 1950- . Monthly.

Contains an agency index and a subject index to all documents and publications of the United Nations.

Legislation

Composite Sources

W-12 Code of Federal Regulations. (United States General Services Administration, National Archives and Records Service, Office of the Federal Registrar). Washington, D. C., 1946- . Irregular.

Contains codification of general and permanent administrative rules and regulations of general applicability and future effect. Kept up to date through cumulative supplements or complete revisions issued annually.

W-13 Copyright Laws and Treaties of the World. United Nations Educational, Scientific and Cultural Organization. Paris, 1956.

Annual supplements.

W-14 How to Find U. S. Statutes and U. S. Code Citations. United States Congress. House. Committee on the Judiciary. Washington, D. C., 1965.

W-15 Index to Foreign Legal Publications. K. Howard Drake, editor. London, Institute of Advanced Legal Studies, 1960- . Quarterly.

Annual cumulation.

Text in English; will have three alphabets (Eastern, Oriental, and Western). Includes reviews of important books.

W-16 Index to Legal Periodicals. H. W. Wilson Co. New York, 1908- . Monthly. (October-August).

W-17 Index to Legal Theses and Research Projects. (American Bar Fourdation). Chicago, Illinois, 1953/54- . Annual.

W-18 Index to Periodical Articles Related to Law. (Law Library Service). Hackensack, New Jersey, 1958- . Bimonthly.

Selected from journals not included in the Index to Legal Periodicals.

W-19 Legislative Research Checklist. (Council of State Governments). Chicago, Illinois, 1959- . Quarterly.

Supplement to the Monthly Checklist of State Publications.

W-20 State Law Index. (United States Library of Congress, Legislative Reference Service). Washington, D. C., 1929-40. Seven Volumes.

An index to the legislation of the states of the United States durng the biennium 1925/26-1938.

See each volume under drainage, electricity, light and power, fish and fisheries, forestry, game, gas, irrigation, etc.

A summary of state laws currently received in the Library of Congress is publiched monthly in mimeographed form.

W-21 United States Statues at Large. (United States General Services Administration, National Archives and Records Service). Washington D. C., 18[illegible]- . Annual.

Bound volumes containing the laws concurrent resolutions, reorganization plans, amendments to the Constitution and Presidential proclamations in the numbered series. Published as soon as possible after each regular session of Congress adjourns sine die.

Natural Resources

W-22 Natural Resources; restrictions, regulations, agreements: oil, land, minerals. United Nations, Secretary-General (Thant). New York, International Review Service, 1964.

Preceeded by a series of United Nations studies and statements, including The Status of Permanent Sovereignty over Natural Wealth and Resources; Preliminary Study (United Nations, Secretariat, New York, 1959). See also, "Permanent Sovereignty over Natural Resources: an analytical review of the United Nations Declaration and its Genesis," International Comparative Law Quarterly 13(2):398-449, April, 1964.

Agriculture

W-23 Agriculture Decisions. (United States Department of Agriculture). Washington, D. C., 1942- . Monthly.

This monthly official publication makes available to the public decisions of the Secretary of Agriculture under regulatory laws administered in the Department. Most decisions are quasi-judicial in character and may be made only after notice and hearing or opportunity for hearing have been given. Current court decisions involving regulatory laws are included in this publication. An annual Index-Digest and Subject-Index of both the Agriculture Decisions and court decisions, lists of decisions reported, table of statutes, orders, etc., cited and construed, and other tables will be found at the end of each December issue. --Catalog

W-24 A Compilation of Statutes relating to soil conservation, marketing quotas and allotments, exports and surplus removal, crop insurance, sugar payments and quotas, marketing agreements and order, school lunch, food stamp and related statutes, as of January 1, 1965. United States Department of Agriculture, Agricultural Stabilization and Conservation Service. Washington, D. C., 1965.

Agricultural Handbook No. 291.

Compilation concerns federal legislation only.

W-25 Current Food Additives Legislation. (Food and Agriculture Organization of the United Nations). Rome, July, 1957- . Ten issues annually.

Issued by the FAO Legislation Research Branch under the joint FAO/WHO program on intentional non-nutritive food additives, this bulletin lists curremt acts and regulations in the field and covers legislation on pesticide residues in food. -- Catalog

W-26 FAO Legislative Series. (Food and Agriculture Organization of the United Nations). Rome, 1957- . Irregular.

Monograph series, covering legal aspects of agricultural problems. No. 1: Animal Feedstuffs (1957); No. 2: Principles of Tenancy Legis lation (1957); No. 3: Principles of Land Consolidation Legislation (1962); No. 5: Groundwater Legislation in Europe (1964).

W-27 Food and Agricultural Legislation. (Food and Agriculture Organization of the United Nations). Rome, 1952- . Quarterly.

W-28 Notices of Judgement. (United States Department of Agriculture). Washington, D. C., 1947- . Irregular.

Gives essential facts of the seizure and of prosecution of cases brought under the Federal Insecticide, Fungicide and Rodenticide Act approved June 25, 1947. Notices are not issued at specific intervals, but are published in groups after the termination of cases in court. --Catalog

W-29 Working Reference of Livestock Regulatory Establishments, Stations, and Officials. (United States Department of Agriculture, Agricultural Research Service). Washington, D. C., 1958- . Yearly.

H-30 Digest of Municipal Air Pollution Ordinances. United States Department of Health, Education and Welfare, Public Health Service. Washington, D. C., 1962.

Includes an introductory statement on "Basic Elements of Air Pollution Control Ordinances."

H-31 Digest of State Air Pollution Laws. United States Department of Health, Education and Welfare, Public Health Organization. Washington, D. C., 1962.

Summarizes major provisions of each law, by section, and includes a general statement and outline of administrative organization. Where no specific law or ordinance exists, they indicate regulations which have been enacted as parts of other laws, or summarize local regulations.

H-32 International Digest of Health Legislation. (World Health Organization). Geneva, 1948/49- . Quarterly.

Summarizes major provisions of legislation dealing with all aspects of health, by country. Occasionally contains a review of all existing legislation on one topic, such as in Vol. 14, No. 2 (1963) on Air Pollution.

H-33 Laws Relating to the National Park Service, 1911-1935. United States Department of the Interior, National Park Service. Washington, D. C., 1936.

Supplement 1 covers 1935-1944, published in 1944. Supplement 2 covers 1944-1963, published in 1963.

W-34 Rocky Mountain Mineral Law Review. (Rocky Mountain Mineral Law Foundation, University of Colorado). Boulder, Colorado, 1964- . Semi-annual.

Includes abstracts and book reviews.

Minerals

W-35 Documents on the Use and Control of the Waters of the Interstate and International Streams: Compacts, Treaties and Adjudications 1956. T. Richard Witmer, editor. New York, United States Department of the Interior. 1956.

W-36 Water-Rights Laws and Related Subjects: A Bibliography. (United States Department of Agriculture, Economic Research Service). Washington, D. C., 1964.

Based on a survey of literature which ended in mid-1959 and on replies to questionnaires sent in early 1958 to state water resource agencies, law schools, agriculture colleges. Coverage of articles and publications dealing in water-rights laws from legal journals during and after 1940, as well as material found in more lengthy books. A section citing articles and books of general interest is also included. Citations usually enumerate the subject matter covered by articles. Indexed by author and title. Does not include discussions appearing in legal encyclopedias, case books, etc; omits most of the literature concerned with drainage laws.

SECTION X

RECREATION

General Note

Information on recreation remains scattered, although the Bureau of Outdoor Recreation of the Department of the Interior is in the process of establishing a coordinating information retrieval system. The Bureau has initiated a periodic reporting service on major actions affecting outdoor recreation, natural beauty, and related conservation matters. The first issue appeared in August, 1966. The service is available from the Superintendent of Documents at $1.50 per year. To meet particular interests, check masters' theses and doctoral dissertations, publications of the Small Business Administration, the Department of Agriculture (Cooperative Extension Service Economic Research Service, State extension stations, the Forest Service etc.) the Department of the Interior (Bureau of Land Management), Department of Health, Education and Welfare (particularly the Public Health Service), the Department of Commerce (Area Redevelopment Administration, now the Economic Development Administration), and publications of and concerning the Outdoor Recreation Resources Review Commission. Information will also be found in the Papers and Proceedings of the Regional Science Association, publications of Resources for the Future, and of private recreation and health associations.

For international and foreign information, check first the publications of the governments concerned, but also publications and statistical information available through UNESCO.

See also: Section W (Legislation).

Bibliographies and Special References

X-1 Annual Bibliography of Completed Research in Health, Physical Education and Recreation. (American Association for Health, Physical Education and recreation). Washington, D. C., 1959- . Annual.

Arranged in three parts: index, bibliography of research published in periodicals (The list of periodicals reviewed is given in the 1963 volume), and a listing with abstracts of unpublished masters' and doctoral theses. --Contents

A single volume list of masters' these in Health, Physical Education and Recreation by Thomas K. Cureton was published in 1952, covering theses completed within the period 1930-1946. A similar listing for the same period and by the same author for doctoral theses is given in the March 1949, issue of Research Quarterly.

X-2 A Bibliography of Research (Theses and Dissertations only) Related to Recreation. Margaret E. Vandersmissen. Iowa City, State University of Iowa, 1962- .

X-3 Federal Outdoor Recreation Programs: The Nationwide Plan for Outdoor Recreation. United States Department of the Interior, Bureau of Outdoor Recreation, Washington, D. C., 1967.

Presents information about the domestic programs of federal agencies which deal with outdoor recreation. Statistics are as of June 30, 1966. Presented in two parts: Part A describes the responsibility of each department, bureau, office, or service; part B describes individual programs in detail. Two indexes.

X-4 Index of Selected Outdoor Recreation Literature. United States Department of the Interior, Bureau of Outdoor Recreation. Washington, D. C., 1969.

This, the third volume of the index, covers materials from late 1966 to early 1968. A general compilation of abstracts of technical articles, bo books, conference proceedings, documents, reports, speeches, and bibliographies on outdoor recreation. Contains subject, name and geographic indices.

X-5 Library Materials for Recreation. Glenn S. Gritzmacher. Washington, D. C., American Recreation Society, 1962.

X-6 Methods of Measuring the Demand for and Value of Outdoor Recreation. Marion Clawson. Washington, D. C., Resources for the Future, 1959.

RFF Reprint No. 10.

X-7 Outdoor Recreation Action. (United States Department of the Interior, Bureau of Outdoor Recreation). Washington, D. C., 1966- . Bi- or tri-monthly.

A periodical which reports private, local, state, and Federal actions in the area of outdoor recreation and environmental quality.

X-8 Research in Recreation. Margaret E. Vandesmissen. New York, National Recreation Association, 1965- . Irregular.

Supplement to the 1962 edition. Compiled by the NRA Research Department.

X-9 Study Reports. Outdoor Recreation Resources Review Commission. Washington, D. C., 1962.

27 volumes. Each report deals with an aspect of outdoor recreation, e. g., acerage vs. potential, leisure, financing, water resources, sport fishing, economic studies and projections, administration.

X-10 Tourism and Recreation. Arthur D. Little. Washington, D. C., United States Department of Commerce, Office of Regional Development Planning, 1967.

Shows the nationwide effects of tourism upon the recreational needs of the United States; tabulates statistics of certain recreational areas. Contains chapter bibliographies.

Statistical Information

X-11 Areas Administered by the National Park Service. (United States National Park Service) Washington, D. C., 1947- . Annual.

X-12 List of National Parks and Equivalent Reserves. United Nations, Secretary-General, New York, 1962.

X-13 Parks for America. United States National Park Service. Washington, D. C., 1964.

A survey of park and related resources in fifty states, and a preliminary plan.

X-14 Public Use, Tabulation of Visitors to Areas Administered by the National Park Service. (United States National Park Service). Washington, D. C., 1953- . Seven times a year.

X-15 Recreation and Park Yearbook. (National Recreation Association). New York, 1907- . Every five years.

X-16 State Outdoor Recreation Statistics, 1962. United States Department of the Interior, Bureau of Outdoor Recreation. Washington, D. C., 1963.

X-17 State Parks: Areas, Acreages and Accommodations, 1960. United States National Park Service. Washington, D. C., 1961.

X-18 United Nations List of National Parks and Equivalent Reserves. International Union for the Conservation of Nature and Natural Resources. International Commission on National Parks. Geneva, 1962.

Part II of the Secretary-General's report.

SECTION Y

FOOD TECHNOLOGY AND NUTRITION

Abstracts and Guides to Research

Y-1 Abstracts for the Advancement of the Industrial Utilization of Wheat. (Washington State University). Pullman, Washington, 1962- . Bimonthly.

Y-2 Bibliography of Food: A Select International Bibliography of Nutrition, Food and Beverage Technology and Distribution, 1936-1956. E. Alan Baker and D. J. Foskett. New York, Academic Press, 1958.

A bibliography covering most of the significant books and pamphlets on nutrition, food economics and food technology published in English together with selected foreign material. Does not include non-published material, publications on cookery or catering, and publications which deal with the production of food. --Bookmark

Y-3 FAO Nutrition Meeting Report Series. (Food and Agriculture Organization of the United Nations). Rome, 1948- . Irregular.

Y-4 FAO Nutritional Studies. (Food and Agriculture Organization of the United Nations). Rome, 1948- . Irregular.

Monographic series includes educational, geographical, political, as well as scientific considerations.

Y-5 Food Processing Abstracts. (Lowry-Croft Associates). Evanston, Illinois, 1963- . Weekly.

Abstracts are presented in card format.

Y-6 Food Research Institute Studies. (Food Research Institute). Stanford, California, 1960/61- . Three times a year.

Issues include bibliographies, statistics, charts, etc. "Dedicated to results of social science research on problems concerning commodities produced in agriculture, the world's food economy, rural economic development."

Y-7 Food Science and Technology. Papers presented at the first International Congress of Food Science and Technology, London, September 18-21, 1962. New York, Gordon and Breach, 1963.

Y-8 Food Technology. (Institute of Food Technologists). Chicago, Illinois, 1947- . Monthly.

Includes abstracts, bibliographies, book reviews, as well as trade literature.

Y-9 Nutrition Abstracts and Reviews. (Commonwealth Bureau of Animal Nutrition, Commonwealth Agricultural Bureaux, England). London, 1931- . Quarterly.

NAR covers publications on chemical composition of food stuffs, vitamins, physiology of nutrition, human diet in relation to health and disease, feeding of animals as well as book reviews, symposia, proceedings and congress reports plus a list of departmental and other reports. NAR coverage is international. Single issues usually begin with a review article and close with an author index. Cumulated author and subject indices are published annually. The January, 1958, issue contains a list of the journals examined. --Bookmark

Y-10 Revue des Fermentations et des Industries Alimentaires. (Societe Belge de Zymologie Pure et Applique). Belgium, CEPIA, 1946- . Monthly.

Includes abstracting as well as advertising and trade literature.

Y-11 Vitamin Abstracts. (Association of Vitamin Chemists). Chicago, Illinois, 1946- . Quarterly.

Y-12 World Food Problems. (Food and Agriculture Organization of the United Nations). Rome, 1956- . Irregular.

International pamphlets on Food and Agricultural problems, designed to meet the need for wide public understanding of the problems and attempts being made to solve them. --Catalog. Semi-popular presentations of research and reference materials.

Y-13 Zeitschrift fur Lebensmittel-Untersuchung und Forshung. (Gesamte Lebensmittle-Wissenschaft). Germany, 1890- . Quarterly.

Includes abstracts, bibliographies, book reviews, as well as advertising, etc.

Special References

Y-14 Composition of Foods: Raw, Processed, Prepared. (United States Department of Agriculture). Washington, D. C., 1964.

Agricultural Handbook No. 8.

Y-15 Dictionary of Nutrition and Food Technology. A. E. Bender. London, Butterworths, 1960.

Y-16 Food Supply Time Series. V. G. Panse. Rome, Food and Agricultural Organization of the United Nations. 1964.

Y-17 Freedom from Hunger Campaign Basic Studies. (Food and Agriculture Organization of the United Nations). Rome, 1961-1962. Completed.

A series of publications prepared expecially to assist individuals and groups in studying the critical problems of hunger and its related social and technical issues throughout the world. --Catalog.

Y-18 Fundamentals of Quality Control for the Food Industry. Amihud Kramer, and B. A. Twigg. Westport, Connecticut, Avi Publishers, 1962.

Y-19 Present Knowledge In Nutrition. 2nd edition. Nutrition Foundation Inc. New York, 1956.

Y-20 Recommended Dietary Allowances. National Academy of Sciences--National Research Council. Washington, D. C., 1958.

Y-21 United States Food Consumption: Sources of Data and Trends, 1909- 1963. United States Department of Agriculture, Economic Research Service. Washington, D. C., 1965.

Statistical Bulletin No. 364.

Preceded by Consumption of Food in the United States, 1909-1952, and Supplements in 1956 and 1960.

Y-22 Agricultural Utilization of Sewage Effluent and Sludge. James P. Law. Washington, D. C., United States Federal Water Pollution Control Association, 1968.

An annotated bibliography containing 300 references on sewage effuent as an agricultural water resource, effects of effluent on soil properties, sanitary aspects, and industrial and recreational uses for wate water utilization.

SECTION Z

QUALITY OF THE ENVIRONMENT, ENVIRONMENTAL HEALTH

General Note

Information on pollution and pollutants before the establishment of present-day quality measurement networks may be found in scientific research journals: particularly chemistry, chemical and metallurgical engineering for the 18th and 19th centuries, biology and health and medicine beginning in the 20th century.

Abstracts, Bibliographies, Indexes, Guides to Research

Z-1 Air Pollution. World Health Organization. New York, Columbia University Press, 1961.

A monograph with contributions from an international group of experts on such topics as history, legislation, the tole of meteorology, problems in sampling, analysis and instrumentation, effects of air pollution on human health, animals and plants, economic and social aspects of air pollution, the control of air pollution by site selection and utilization, including a chapter on radioactive pollution of the atmosphere.

Z-2 Air Pollution: A Bibliography. S. J. Davenport and G. G. Morgin. United States Department of the Interior, Bureau of Mines. Washington, D. C., 1954.

Bureau of Mines Bulletin No. 537.

A comprehensive bibliography of outdoor atmospheric pollution arranged by subject with the abstracts given under each subject in chronological order. Subjects covered include: general aspects of air pollution, nature and origin of pollution, composition of air pollutants, effects of air pollution, control of air pollution, legal aspects and costs. Includes author index.

See also the Air Pollution Bibliography compiled in 1957 by the Library of Congress, and a second volume, or edition, compiled in 1960 by the Robert A. Taft Sanitary Engineering Center (Technical Report A 60-69), and Air Pollution Publications: A Selected Bibliography, 1955-62. United States Health Service Publication 969 (1962).

Z-3 Annual Report of the Secretary of the Department of Health, Education and Welfare. (United States Department of Health, Education and Welfare, Office of the Secretary). Washington, D. C., 1963- . Annual.

Z-4 APCA Abstracts. (Air Pollution Control Association). Pittsburgh, Pa., 1955- . Monthly.

Z-5 Archives of Environmental Health. (American Academy of Occupational Medicine). Rochester, New York, 1950- . Monthly.

A review periodical.

Z-6 Atmospheric Environment. (International Association on Air Pollution Research). Oxford, 1967- . Monthly.

Formed by division of International Journal of Air and Water Pollution.

Publishes papers in all aspects of air pollution research which are of other than purely local interest. Contains an Air Pollution Bibliography, appearing irregularly in certain numbers; also contains book reviews.

Z-7 Bibliography on Air and Water Pollution. Marie S. Richarson. Chicago, Illinois, Special Libraries Association, 1966.

Four sections: 1) a listing of organizations and associations, 2) monographs, 3) serial titles, 4) current articles as of 1966. 117 entries.

Originally published as a bulletin of the Special Libraries Association.

Z-8 Bibliography on the Utilization of Waste Products. A. R. Ghani. Karachi, Pakistan, National Scientific and Documentation Centre, 1960.

Pansdoc Bibliography 266.

Z-9 Bibliography on Thermal Pollution. Journal of the Sanitary Engineering Division, American Society of Civil Engineers. New York, 1967.

Includes articles relating to the effects of unnatural increase or decrease of water temperature due to industrial use of water.

Z-10 The Cost of Clean Water. United States Department of the Interior, Federal Water Pollution Control Administration. Washington, D. C., 1968.

A series of studies on the treatment of municipal and industrial wastes. Waste treatment project alternatives are described for 1) Blast furnaces and steel mills, 2) Motor vehicles and parts, 3) Paper mills, 4) Textile mills, 5) Petroleum refining, 6) Fruit and vegetable processing, 70 Leather tanning and finishing, 8) Meat products, 9) Dairies, 10) Plastics materials and resins.

Z-11 The Cost of Clean Water and its Economic Impact. United States Federal Water Pollution Control Administration. Washington, D. C., United States Department of the Interior, 1969.

Three volumes; the first updates the 1968 report on sewage treatment economics; the second tabulates statistics from municipal sewage treatment plants, and the third reports on sewage charges.

Z-12 Directory of Information Resources in the United States: Water. National Referral Center for Science and Technology. Washington, D. C., 1966.

Describes the organizations and institutions which are doing research on water and water-related subjects.

Z-13 Directory of Water Pollution Research Laboratories. Organization for Economic Cooperation and Development. Paris, 1965.

Lists the addresses, directors and facilities provided in water pollution research laboratories in O.E.C.D. member nations, plus those in seven non-member Eastern European nations.

Z-14 Environmental Biology. Philip L. Altman and Dorothy S. Ditmer, editors. Bethesda, Maryland, Gederation of American Societies for Experiemntal Biology, 1966.

A reference work containing tables and charts relating environmental conditions such as energy, temperature, pollution, gravity, vibration, and pressure to changes observed in organisms.

Z-15 Environmental Health Series. (United States Department of Health, Education and Welfare, Public Health Service). Washington, D. C., various dates. Irregular.

Composite source.

Scientific reports of research in the various fields of environmental health.

Z-16 Environmental Science and Technology. (American Chemical Societv). Washington, D. C., 1967- . Monthly.

Publishes articles dealing with the chemical advances in all fields of environmental research.

Z-17 Future Environments of North America. F. Fraser Darling and John P. Milton, editors. Garden City, New York, Natural History Press, 1960.

A collection of over 40 articles written by scholars attending the Conference of the Conservation Foundation in April, 1965.

Z-18 Guide to Research in Air Pollution. 5th edition. United States Department of Health, Education and Welfare, Public Health Service. Washington, D. C., 1962.

Public Health Service Publication No. 981.

Z-19 Guide to Research in Air-Pollution. (United States Department of Health, Education and Welfare, Public Health Service). Washington, D. C., 1966- . Annual.

The sixth edition is divided into four parts: 1) summarizes the status of research as a whole, 2) lists individual projects under investigation, 3) and 4) index these projects by subject and investigator. Earlier editions published by the Committee on Air Pollution Control of the American Society of Mechanical Engineers.

Z-20 An Inventory of Social and Economic Research on Health. (Health Information Foundation). Chicago, Illinois, University of Chicago, 1952- . Annual.

Now financed with the aid of the Ford Foundation and compiled from questionnaires sent to domestic organizations and individuals. Its contents include: studies related to health levels, studies related to behavioral aspects of health, to health resources, and economic aspects of health. Appendices include financial sponsors, conducting organizations, and project personnel, indices, and a listing of other HIF publications.

Z-21 Journal of the APCA. (Air Pollution Control Association). Pittsburgh, Pa., 1950- . Monthly.

A journal of research.

Z-22 Journal of the Water Pollution Control Federation. (The Water Pollution Control Federation). Washington, D. C., 1928- . Varies.

Known as Sewage Works Journal until January, 1950, and Sewage and Ind Industrial Wastes, from then until January, 1960, when it assumed its present name. Publishes articles dealing with the methodology and economics of the treatment of municipal and industrial wates. Includes multilingual abstracts and a list of W.P.C.F. member associations.

Z-23 Oil Pollution of Marine Waters, A Bibliography. J. E. Yee. Washington, D. C., United States Department of the Interior Library, 1968.

Includes literature written from 1950 to date. 253 entries.

Z-24 Public Health Economics and Medical Care Abstracts. (University of Michigan, School of Public Health, Bureau of Public Health Economics). Ann Arbor, Michigan, 1944- . Monthly.

Z-25 Public Health Engineering Abstracts. (United States Department of Health, Education and Welfare, Public Health Service). Washington, D. C., 1921- . Monthly.

Covers more than 800 domestic and foreign journals of science and engineering, reports of State and Federal governments, reports and proceedings of scientific research groups in the area of environmental health. Annual index issue.

Z-26 Readings in Natural Beauty; A Selected Bibliography. Signe Ruh Otterson, Washington, D.C., United States Department of the Interior Library, 1967- .

Lists publications dealing with natural beauty under Environmental Setting, Planning, Environmental Pollution, Urban Townscape, Landscape Architecture, Historic Preservation, Outdoor Recreation, Environment, and Transportation. 1130 entries.

Z-27 Reference List of Publications of the Robert A. Taft Sanitary Engineering Center. United States Department of Health, Education and Welfare. Public Health Service. Cincinnati, Ohio, 1963.

Z-28 Report. (World Health Organization, Expert Committee on Environmental Sanitation). Geneva, 1949- . Annual.

The 1957 and 1963 issues are devoted to air pollution.

Z-29 Research Grants Index. (U.S. Department of Health, Education and Welfare, Public Health Service). Washington, D.C., 1961- . Annual.

Z-30 U. S. S. R. Literature on Air Pollution and Related Occupational Diseases. B. S. Levine. Washington, D. C., Public Health Service, 1960.

Z-31 Water Pollution Abstracts. (Great Britain Department of Scientific and Industrial Research, Water Pollution Research Board). London, 1928- . Monthly.

Arrangement is by subject (water supplies, analysis and examination of water, sewage, trade waste waters, and pollution of natural waters) with abstracts taken from the world's literature on water pollution. Annual cumulated author and subject indices are prepared. Prior to V. 22, these abstracts were published with the title Water Pollution Summary of Current Literature. --Bookmark

Z-32 Water Pollution Control Research and Training Grants. United States Department of the Interior, Federal Water Pollution Control Administration. Washington, D. C., 1967.

Lists research grants of fiscal year 1967. Also see previous yearly lists; published irregularly.

Z-33 Water Quality Criteria. 2nd edition. California State Water Pollution Control Board. California Institute of Technology, Pasadena, California, 1962.

Compilation of 200 references on qualities for industry, fishing, swimming, irrigation, etc.

Z-34 Water Resource Activities in the United States--Water Requirements for Pollution Abatement. United States Senate Select Committee on National Water Resources. Washington, D. C., 1960.

Committee Print No. 29.

Statistical Inventories and Directories

Z-35 Air Pollution Measurements of the National Sampling Network, 1957-1961. United States Department of Health, Education and Welfare, Public Health Service. Washington, D. C., 1962.

Z-36 Air Quality Data from the National Air Sampling Networks and Contributing State and Local Networks. (U. S. Laboratory of Engineering and Physical Sciences, Air Quality Section). Cincinnati, U. S. Department of Health, Education and Welfare, Public Health Service, Division of Air Pollution, 1964/65- . Annual

Z-37 Annual Fluoridation Census Reports: National, State and Community Experience. (U.S. Division of Dental Public Health). Washington, D.C., 1965(?)- . Annual.

Z-38 Directory of Governmental Air Pollution Control Agencies. (Air Pollution Control Association and the United States Department of Health Education and Welfare, Public Health Service). Pittsburgh, Pa., 1955- . Irregular.

Includes state and local agencies in the United States and its territories: Canada; agency addresses, names of principal administrators, size and composition of professional staff.

Z-39 Drinking Water Standards. United States Department of Health, Education and Welfare, Public Health Service. Washington, D. C., 1962.

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